

# Record of Letter Ballot Review by TC Chapter for Procedural Review

Region/Locale: [Japan](#)

Global Technical Committee: [EHS](#)

TC Chapter Cochairs: [Hidetoshi Sakura/Independent](#), [Supika Mashiro/Tokyo Electron](#), [Moray Crawford/Hatsuta Seisakusho](#),

Standards Staff: [Junko Collins](#)

	Scheduled in Background Statement	Actual
Date	06/28/2016	06/28/2016
Location	SEMI Japan Meeting Room, Tokyo, Japan	SEMI Japan Meeting Room, Tokyo, Japan
Reason for Change of Date and/or Location (if changed)		

Note: See *Regulations* ¶ 9.5 Exception for allowable reason to change.

## I. Document Number and Title

Document Number	Document Title
5947A	REVISION TO SEMI S23-0813, with title change from “GUIDE FOR CONSERVATION OF ENERGY, UTILITIES AND MATERIALS USED BY SEMICONDUCTOR MANUFACTURING EQUIPMENT” to “GUIDE FOR ENERGY, UTILITIES, AND MATERIALS USE EFFICIENCY OF SEMICONDUCTOR MANUFACTURING EQUIPMENT”

## II. Tally

Standards staff to fill in.

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

Note: A minimum of 60% of the Voting Interests that have TC Members within the global technical committee that issued the Letter Ballot must return Votes. (*Regulations* ¶ 9.7.1.1)

Voting Tally (with example values):

Voting Interest:	Returned Votes	Distribution	Return Rate	
Letter Ballot	56	÷ 92	= 60.9%	≥60%
Intercommittee Ballot	29			
Voting Interest Reject(s)	2	Total Voters with Rejects		2
Voting Interest Accept(s)	42			

Note: See *Regulations* § 3.2.1 for definition of Voting Interest.

### III. Rejects

#### Voting Interest Reject 1 (Voting Interest Name: Applied Materials) Voter Reject 1 (Voter: Edward Karl)

##### Negative 1

	Referenced Section/ Paragraph	<b>*TF/TC Chapter to fill in, including text in the ballot if necessary.</b>	
		5.2.4(Definition)	
Negative	Negative Text	<b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b>	
		<p>Energy per unit of goods is more widely used in ITRS and is the unit deployed in ECF of this document Throughout the document the context of energy efficiency is not limited to the actual energy consumed by the SME but is referencing the total equivalent energy of the utilities and materials consumed by the SME</p> <p>Change to “the quantity of energy required to produce a unit of goods or services, e.g. kWh/cm<sup>2</sup>, kWh/die, kWh/m<sup>3</sup>.” Justification: Add Note: Within the document were Energy consumed is referenced this may mean the actual energy consumed by the SME or it may also refer to the equivalent energy consumed to generate a utility or material used by the SME. Unless explicitly referring to the energy consumed by the SME the energy of the SME may also include the actual plus the equivalent energy.</p>	
TF input (optional)			
	Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter. <b>GO TO “Related” subsection</b>
		<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY. <b>GO TO “Final” subsection → (A)</b>
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	‘Related’ is mutually agreed upon. <b>(Needs no motion.)</b> <b>GO TO “Persuasive” subsection</b>
		<input type="checkbox"/>	Negative is not related. <b>(Needs ≥2/3 votes to pass.)</b>
			Reason XXXX
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Discussion		
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.	
		<input type="checkbox"/>	[Negative is not related.] < 2/3 <b>GO TO “Persuasive” subsection</b>
		<input type="checkbox"/>	2/3 ≤ [Negative is not related.] <b>GO TO “Final” subsection → (B)</b>
Persuasi	Motion and Reason (check one)	<input type="checkbox"/>	Negative is related and persuasive. <b>(Needs &gt;1/3 votes to pass.)</b>
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. <b>(Needs ≥2/3 votes to pass.)</b>

						<ul style="list-style-type: none"> <li>ITRS does not define energy efficiency. (It has energy consumption target per total processed area for the Fab). As long as the term is defined and used in accordance with that definition, there is no justification to change the definition as suggested.</li> <li>The key point of the submitter seems to be the difference between 'required' and 'consumed'. 'Required' seems too prospective. The more concrete term 'consumed' is appropriate for the scope of the Guide as this Guide is dealing about the energy consumed by the SME to process wafer rather than the energy that is required to manufacture a semiconductor device</li> <li>The implied point of the submitter that 'energy consumed' can only mean energy directly consumed by the equipment is baseless. Energy consumed by items inherent in the provision of other utilities to the equipment can be included and actually is included to energy consumption measurement and evaluation of efficiency of this Guide</li> </ul>
		<b>Reason</b>				
<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Kenji Sugihara (Panasonic)					
<b>Discussion</b>						
	8 Y-0 N; Motion passed/ (vote by interest)					
<b>Result of Vote (check one)</b>		[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>		Y	GO TO "Address by Technical Change Option" subsection
		[Negative is related and not persuasive.] < 2/3			N	GO TO "Final" subsection → (E)
		2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)			
	x	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection			
<b>Address by Technical Change Option</b>	<b>Technical Change Recommendations</b>					
	Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.					
	1	FROM: Section/Paragraph XXX				
		TO: Section/Paragraph xxx				
		Justification (If necessary)				
	2	FROM: Section/Paragraph XXX				
		TO: Section/Paragraph xxx				
		Justification (If necessary)				
	<b>Motion</b>		Negative is addressed by the technical change(s).			
	<b>Motion by/2<sup>nd</sup> by</b>		Name (Company)/Name (Company)			

Discussion			
Result of Vote (check one)		<input type="checkbox"/> 2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection
		<input type="checkbox"/> [Negative is not addressed by the technical change(s).] < 2/3	GO TO “Final” subsection → (E)
Incorporation of the Technical Change	Motion	To incorporate the technical change(s).	
	Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Discussion		
	Result of Vote (check one)	<input type="checkbox"/> 90% ≤ [Agree to incorporate.]	GO TO “Final” subsection → (F)
<input type="checkbox"/> [Disagree to incorporate.] > 10%		GO TO “Final” subsection → (E)	
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)		
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/> It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)
		<input type="checkbox"/> It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)
		<input type="checkbox"/> Whether or not the Negative is “not significant” is decided by a vote.	
	Motion	The Negative is “not significant”.	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Vote	<input type="checkbox"/> XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)
<input type="checkbox"/> XX Y-XX N; Motion failed with simple majority		GO TO “Final” subsection → (C)	
Final	(check if applicable)	<input type="checkbox"/> (A)	Withdrawn (counted under h in disposition)
		<input type="checkbox"/> (B)	Not related (counted under i in disposition)
		<input type="checkbox"/> (C)	Related and not persuasive (significant)
		<input checked="" type="checkbox"/> (D)	Not significant (counted under j in disposition)
		<input type="checkbox"/> (E)	Related and persuasive and not addressed by technical change
	<input type="checkbox"/> (F)	Addressed by technical change (counted under k disposition)	
(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment #.	
<b>Negative 2</b>			
Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 5.2.4 NOTE 4(Definition)	
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.	

		<p>A more common method of expressing energy efficiency is energy/unit rather than the proposed definition of unit/energy. ITRS uses energy/unit for many of its metrics (e.g. kWh/cm<sup>2</sup>, kWh/gallon) as well as the ECF used in this document are also energy per unit. By expressing in energy/unit the Note could be deleted or if examples are still needed</p> <p>Change to:</p> <p>The dimension of the denominator depends on what is being produced; the dimension of the numerator is energy. For example, if Machine A requires 25 Joules to produce a box its energy efficiency is 25 joules/box and if Machine B requires 50 joules its energy efficiency is 50 joules/box and so on. In this example, If the boxes are the same Machines A would be considered more energy efficient than Machine B. If Machine Z requires 50 joules of energy per bottle, its energy efficiency is 50 joules/bottle. Since bottles and boxes are not the same the energy efficiency of Machine Z cannot be compared to the energy efficiencies of Machines A or B, because 'boxes' are different from 'bottles' and so the things produced (and, therefore, the units of energy efficiency) are different.</p>	
TF input (optional)			
Withdrawal (check one)	X	No Negative withdrawal made by Voter.	GO TO "Related" subsection
		Withdrawal document received by Standards staff on MM/DD/YYYY.	GO TO "Final" subsection → (A)
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.) GO TO "Persuasive" subsection
			Negative is not related. (Needs ≥2/3 votes to pass.)
		Reason	XXXX
	Motion by/ 2 <sup>nd</sup> by	(Company)/Name (Company)	
	Discussion		
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.	
		[Negative is not related.] < 2/3	GO TO "Persuasive" subsection
		2/3 ≤ [Negative is not related.]	GO TO "Final" subsection → (B)
Persuasive	Motion and Reason (check one)		Negative is related and persuasive. (Needs >1/3 votes to pass.)
		x	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)
		Reason	In a ratio, the question of what should be the numerator is generally the item for which unitary information is most important. In the context of S23, it is more important to know how many Joules it takes to process, e.g., one wafer, than it is to know what fraction of a wafer can be processed with one Joule.
	Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Kenji Sugihara (Panasonic)	
	Discussion		
Result of Vote	8 Y-0 N; Motion passed/.		

	<b>(check one)</b>		<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended?</b> <b>(check one)</b>	<input type="checkbox"/>	Y	GO TO "Address by Technical Change Option" subsection	
	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3	<input type="checkbox"/>	N		GO TO "Final" subsection → (E)			
	<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)						
	<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection						
<b>Technical Change Recommendations</b>									
Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.									
<b>Address by Technical Change Option</b>	<b>Technical Changes</b>	1	FROM: Section/Paragraph <b>XXX</b>						
			TO: Section/Paragraph <b>xxx</b>						
			Justification <b>(if necessary)</b>						
	2	FROM: Section/Paragraph <b>XXX</b>							
		TO: Section/Paragraph <b>xxx</b>							
		Justification <b>(if necessary)</b>							
<b>Motion</b>			Negative is addressed by the technical change(s).						
<b>Motion by/2<sup>nd</sup> by</b>			Name (Company)/Name (Company)						
<b>Discussion</b>									
<b>Result of Vote (check one)</b>			XX Y-XX N; Motion passed/failed.						
			<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection				
			<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)				
<b>Incorporation of the Technical Change</b>	<b>Motion</b>			To incorporate the technical change(s).					
	<b>Motion by/2<sup>nd</sup> by</b>			Name (Company)/Name (Company)					
	<b>Discussion</b>								
	<b>Result of Vote (check one)</b>			XX Y-XX N; Motion passed/failed.					
			<input type="checkbox"/>	90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)				
			<input type="checkbox"/>	[Disagree to incorporate.] > 10%	GO TO "Final" subsection → (E)				
<b>Significant Finding</b>	<b>This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.4.4.2)</b>								
	<b>Use of "Not significant"</b>	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant".					GO TO "Final" subsection → (D)	

	<b>finding option” (check one)</b>	<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”.	<b>GO TO “Final” subsection → (C)</b>	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.		
	<b>Motion</b>	The Negative is “not significant”.			
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)			
	<b>Vote</b>	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	<b>GO TO “Final” subsection → (D)</b>	
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	<b>GO TO “Final” subsection → (C)</b>		
<b>Final</b>	<b>(check if applicable)</b>	<input type="checkbox"/>	<b>(A)</b>	Withdrawn <b>(counted under h in disposition)</b>	
		<input type="checkbox"/>	<b>(B)</b>	Not related <b>(counted under i in disposition)</b>	
		<input type="checkbox"/>	<b>(C)</b>	Related and not persuasive (significant)	
		<input checked="" type="checkbox"/>	<b>(D)</b>	Not significant <b>(counted under j in disposition)</b>	
		<input type="checkbox"/>	<b>(E)</b>	Related and persuasive and not addressed by technical change	<b>DOCUMENT FAILS</b>
		<input type="checkbox"/>	<b>(F)</b>	Addressed by technical change <b>(counted under k disposition)</b>	
	<b>(check if applicable)</b>	<input type="checkbox"/>	Comment generated. <b>See Section V-(ii) Comment # X.</b>		

### Negative 3

<b>Negative</b>	<b>Referenced Section/ Paragraph</b>	*TF/TC Chapter to fill in, including text in the ballot if necessary. 5.2.9(Definition)		
	<b>Negative Text</b>	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. The definition for idle mode include a criteria of up to 15 seconds prior to entering the process mode without any justification, rationale or indication of why 15 seconds and/or how this transition period going to be characterized in this document Proposed Solution: idle mode – the mode where the SME is energized and readied for processing (all system ready and process conditions controlled) but is not actually performing any active function such as material movement or processing.[modified from SEMI E6]		
<b>TF input (optional)</b>				
<b>Withdrawal (check one)</b>	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.	<b>GO TO “Related” subsection</b>	
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.	<b>GO TO “Final” subsection → (A)</b>	
<b>Related</b>	<b>Motion and Reason (check one)</b>	<input checked="" type="checkbox"/>	‘Related’ is mutually agreed upon. <b>(Needs no motion.)</b>	<b>GO TO “Persuasive” subsection</b>
		<input type="checkbox"/>	Negative is not related. <b>(Needs ≥2/3 votes to pass.)</b>	
		<b>Reason</b>	XXXX	
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)		
	<b>Discussion</b>			
<b>Result of Vote (check one)</b>	<input type="checkbox"/>	XX Y-XX N; Motion passed/failed.		
	<input type="checkbox"/>	[Negative is not related.] < 2/3	<b>GO TO “Persuasive” subsection</b>	

			$2/3 \leq$ [Negative is not related.]			<b>GO TO “Final” subsection → (B)</b>	
<b>Persuasive</b>	<b>Motion and Reason (check one)</b>		Negative is related and persuasive. <b>(Needs &gt;1/3 votes to pass.)</b>				
		x	Negative is related and not persuasive. <b>(Needs <math>\geq 2/3</math> votes to pass.)</b>				
			Reason	It is not common for SEMI safety guidelines to include the rationale for all values, and if rationale is provided it is usually in a Note. The value of 15 seconds was selected by the task force as a preferable (measurable and clear) alternative to a word such as “immediately”. The submitter has not provided a rationale for the additional changes they are proposing for the definition. The proposed revised definition does not differentiate idle from rest, which the TF has decided is an important concept.			
		<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Kenji Sugihara (Panasonic)				
		<b>Discussion</b>	Perhaps we should have a NOTE including a diagram to show how suggested 4 modes cover active time of SME comprehensively. TF would support providing a note to the effect of “The value of 15 seconds was selected by the task force as a preferable (measurable and clear) alternative to a word such as “immediately”  Note for every definite recommended number is not practical.				
		<b>Result of Vote (check one)</b>		[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>		Y <b>GO TO “Address by Technical Change Option” subsection</b>
			[Negative is related and not persuasive.] < 2/3			N <b>GO TO “Final” subsection → (E)</b>	
			$2/3 \leq$ [Negative is related and not persuasive.] < 90%			<b>GO TO “Final” subsection → (C)</b>	
		x	$90\% \leq$ [Negative is related and not persuasive.]			<b>GO TO “Not Significant Finding Option” subsection</b>	
<b>Address by Technical Change Option</b>	<b>Technical Change Recommendations</b>						
	Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.						
	<b>Technical Changes</b>	1	FROM: Section/Paragraph <b>XXX</b>				
			TO: Section/Paragraph <b>xxx</b>				
			Justification <b>(if necessary)</b>				
	2	FROM: Section/Paragraph <b>XXX</b>					
		TO: Section/Paragraph <b>xxx</b>					



		<b>Justification (if necessary)</b>	
	<b>Motion</b>	Negative is addressed by the technical change(s).	
	<b>Motion by/2<sup>nd</sup> by</b>	Name (Company)/Name (Company)	
	<b>Discussion</b>		
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.	
		<input type="checkbox"/> 2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection
		<input type="checkbox"/> [Negative is not addressed by the technical change(s).] < 2/3	GO TO “Final” subsection → (E)
<b>Incorporation of the Technical Change</b>	<b>Motion</b>	To incorporate the technical change(s).	
	<b>Motion by/2<sup>nd</sup> by</b>	Name (Company)/Name (Company)	
	<b>Discussion</b>		
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.	
<input type="checkbox"/> 90% ≤ [Agree to incorporate.]		GO TO “Final” subsection → (F)	
<input type="checkbox"/> [Disagree to incorporate.] > 10%		GO TO “Final” subsection → (E)	
<b>Not Significant Finding Option</b>	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)		
	<b>Use of “Not significant finding option” (check one)</b>	<input checked="" type="checkbox"/> It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)
		<input type="checkbox"/> It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)
		<input type="checkbox"/> Whether or not the Negative is “not significant” is decided by a vote.	
	<b>Motion</b>	The Negative is “not significant”.	
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)	
	<b>Vote</b>	<input type="checkbox"/> XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)
<input type="checkbox"/> XX Y-XX N; Motion failed with simple majority		GO TO “Final” subsection → (C)	
<b>Final</b>	<b>(check if applicable)</b>	<input type="checkbox"/> (A) Withdrawn (counted under h in disposition)	
		<input type="checkbox"/> (B) Not related (counted under i in disposition)	
		<input type="checkbox"/> (C) Related and not persuasive (significant)	
		<input checked="" type="checkbox"/> (D) Not significant (counted under j in disposition)	
		<input type="checkbox"/> (E) Related and persuasive and not addressed by technical change	DOCUMENT FAILS
		<input type="checkbox"/> (F) Addressed by technical change (counted under k disposition)	
	<b>(check if applicable)</b>	Comment generated. See Section V-(ii) Comment # X.	
<b>Negative 4</b>			
<b>9 at</b>	<b>Referenced</b>	*TF/TC Chapter to fill in, including text in the ballot if necessary.	

	<b>Section/ Paragraph</b>	<b>5.2.13 Terminology of rest mode</b>	
	<b>Negative Text</b>	<b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b>	
		<p>The definition for rest mode is similar to sleep mode with the only difference being “automatically entered” versus “external command”. When the SME is performing an action due to the SME receiving a command or signal telling the SME to perform a certain action. A command /signal may be initiated when needed or pre-programmed based on certain predefined criteria, as such action just do not happens “automatically”. “External” or “internal” is a relative term depending on where the line is drawn. A signal directed from a system (e.g. CVD) to the sub-system (pump) is regarded as external to the sub-system but is internal to the factory control software (MES). The sub-system (pump) goes into a lower energy consumption state when the pump motor received a command from its variable frequency driver (VFD) to slowdown since the VFD had receive a signal from the pressure transducer indicating a condition had been met. From the pump motor level, the command to slowdown is external to the pump, but from the system level the command for the pump to slow down is internal. So from the system level, the pump system may look like it “automatically” goes into a different mode, but it’s really doing is what being told. Provide rationale or example of SME in “rest” mode.</p> <p>Proposed Solution: keep it simple, delete 5.2.3 for “rest mode” as this is just another different “sleep level” of the “sleep mode” as noted in Section 5.2.16. Remove all instances of the word “rest” and “rest mode” from the document.</p>	
	<b>TF input (optional)</b>		
	<b>Withdrawal (check one)</b>	X	No Negative withdrawal made by Voter. <b>GO TO “Related” subsection</b>
			Withdrawal document received by Standards staff on MM/DD/YYYY. <b>GO TO “Final” subsection → (A)</b>
<b>Related</b>	<b>Motion and Reason (check one)</b>	X	‘Related’ is mutually agreed upon. <b>(Needs no motion.)</b> <b>GO TO “Persuasive” subsection</b>
			Negative is not related. <b>(Needs ≥2/3 votes to pass.)</b>
			Reason XXXX
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)	
	<b>Discussion</b>		
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.	
		[Negative is not related.] < 2/3 <b>GO TO “Persuasive” subsection</b>	
		2/3 ≤ [Negative is not related.] <b>GO TO “Final” subsection → (B)</b>	
<b>Persuasi ve</b>	<b>Motion and Reason (check one)</b>		Negative is related and persuasive. <b>(Needs &gt;1/3 votes to pass.)</b>
		x	Negative is related and not persuasive. <b>(Needs ≥2/3 votes to pass.)</b>

	Reason	<p>Distinction between the rest mode and sleep mode is distinct as what is external/internal can be clearly judged relative to the SME as the direct actor of bringing SME to rest mode is clearly specified to be the SME while the actor of bringing SME to sleep mode is not SME (e.g. manual action by human or host command).</p> <p>S23 is written from the POV of a system. The user must indeed have a clear conceptual line around the system they are assessing. Once the assessment target is established a “the system” then any signals from system controllers to subsystems are internal.</p> <p>Rest mode is not another sleep level as it is not begun by an external command.</p>
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<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Kenji Sugihara (Panasonic)
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<b>Discussion</b>	
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	9 Y-0 N; Motion passed			
<b>Result of Vote (check one)</b>		[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	Y GO TO “Address by Technical Change Option” subsection
		[Negative is related and not persuasive.] < 2/3		N GO TO “Final” subsection → (E)
		2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)	
	x	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection	

**Technical Change Recommendations**

Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.

<b>Address by Technical Change Option</b>	<b>Technical Changes</b>	1	FROM: Section/Paragraph XXX
			TO: Section/Paragraph xxx
			Justification (if necessary)
	2	FROM: Section/Paragraph XXX	
		TO: Section/Paragraph xxx	
		Justification (if necessary)	

<b>Motion</b>	Negative is addressed by the technical change(s).
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	Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Discussion		
	Result of Vote (check one)	<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).] GO TO “Incorporation of the Technical Change” subsection
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3 GO TO “Final” subsection → (E)
Incorporation of the Technical Change	Motion	To incorporate the technical change(s).	
	Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Discussion		
	Result of Vote (check one)	<input type="checkbox"/>	90% ≤ [Agree to incorporate.] GO TO “Final” subsection → (F)
<input type="checkbox"/>		[Disagree to incorporate.] > 10% GO TO “Final” subsection → (E)	
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)		
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”. GO TO “Final” subsection → (D)
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”. GO TO “Final” subsection → (C)
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.
	Motion	The Negative is “not significant”.	
	Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority GO TO “Final” subsection → (D)	
	<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority GO TO “Final” subsection → (C)	
Final	(check if applicable)	<input type="checkbox"/>	(A) Withdrawn (counted under h in disposition)
		<input type="checkbox"/>	(B) Not related (counted under i in disposition)
		<input type="checkbox"/>	(C) Related and not persuasive (significant)
		<input checked="" type="checkbox"/>	(D) Not significant (counted under j in disposition)
		<input type="checkbox"/>	(E) Related and persuasive and not addressed by technical change DOCUMENT FAILS
	<input type="checkbox"/>	(F) Addressed by technical change (counted under k disposition)	
(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.	

### Negative 5

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 5.2.17 Terminology of sleep mode
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.

		<p>The definition indicated that an external command is required for the SME to go to sleep mode. As external/internal is a relative term the SME should transition to sleep mode when received a command to do so. The sentence “but otherwise ready for processing” is not needed since in idle mode, it is ready for processing by definition.</p> <p>Proposed Solution: remove the word “external” and “but otherwise ready for processing”. Revised definition: “sleep mode – the mode entered by the SME in response to a command in which there will be a delay to return to idle mode. Average equivalent energy use rate in this mode is less than in idle mode.”</p>				
	<b>TF input (optional)</b>					
	<b>Withdrawal (check one)</b>	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO “Related” subsection	
		<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO “Final” subsection → (A)	
<b>Related</b>	<b>Motion and Reason (check one)</b>	<input checked="" type="checkbox"/>	‘Related’ is mutually agreed upon. (Needs no motion.)		GO TO “Persuasive” subsection	
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)			
			Reason	XXXX		
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)				
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.				
<input type="checkbox"/>		[Negative is not related.] < 2/3		GO TO “Persuasive” subsection		
<input type="checkbox"/>		2/3 ≤ [Negative is not related.]		GO TO “Final” subsection → (B)		
<b>Persuasive</b>	<b>Motion and Reason (check one)</b>	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)			
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			
			Reason	<p>External vs. internal is clear and not a relative term once the target system for the assessment has been defined.</p> <p>Default target system for the assessment in the main body of S23 is SME</p>		
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Kenji Sugihara (Panasonic)				
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	9Y-0 N; Motion passed				
<input type="checkbox"/>		[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input type="checkbox"/>	Y GO TO “Address by Technical Change Option” subsection	
<input type="checkbox"/>		[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N GO TO “Final” subsection → (E)	
<input type="checkbox"/>		2/3 ≤ [Negative is related and not persuasive.] < 90%		GO TO “Final” subsection → (C)		

		x	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection	
Address by Technical Change Option	<b>Technical Change Recommendations</b>				
	Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.				
	1	Technical Changes	FROM: Section/Paragraph XXX		
			TO: Section/Paragraph xxx		
	Justification (if necessary)				
	2	FROM: Section/Paragraph XXX			
		TO: Section/Paragraph xxx			
		Justification (if necessary)			
	Motion		Negative is addressed by the technical change(s).		
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
Discussion					
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.			
		2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection		
		[Negative is not addressed by the technical change(s).] < 2/3	GO TO “Final” subsection → (E)		
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).		
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
	Discussion				
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
		90% ≤ [Agree to incorporate.]	GO TO “Final” subsection → (F)		
		[Disagree to incorporate.] > 10%	GO TO “Final” subsection → (E)		
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)				
	Use of “Not significant finding option” (check one)	x	It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)	
			It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)	
			Whether or not the Negative is “not significant” is decided by a vote.		
	Motion		The Negative is “not significant”.		
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)			

	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)
		<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority	GO TO “Final” subsection → (C)
Final	(check if applicable)	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)
		<input type="checkbox"/>	(B)	Not related (counted under i in disposition)
		<input type="checkbox"/>	(C)	Related and not persuasive (significant)
		<input checked="" type="checkbox"/>	(D)	Not significant (counted under j in disposition)
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change
	<input type="checkbox"/>	(F)	Addressed by technical change (counted under k disposition)	
	(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.	

### Negative 6

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. Note 5 in Terminology			
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. See AMAT4 and AMAT5 regarding the word “external” Proposed Solution: remove the word “external” from the sentence			
TF input (optional)					
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO “Related” subsection	
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO “Final” subsection → (A)	
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	‘Related’ is mutually agreed upon. (Needs no motion.)		GO TO “Persuasive” subsection
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)		
		Reason	XXXX		
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)			
	Discussion				
Result of Vote (check one)	XX Y-XX N; Motion passed/failed.				
	<input type="checkbox"/>	[Negative is not related.] < 2/3		GO TO “Persuasive” subsection	
	<input type="checkbox"/>	2/3 ≤ [Negative is not related.]		GO TO “Final” subsection → (B)	
Persuasive	Motion and Reason (check one)	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)		
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)		
		Reason	External vs. internal is clear once the target system for the assessment has been defined.		
Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Kenji Sugihara (Panasonic)				

<b>Discussion</b>						
<b>Result of Vote (check one)</b>		9 Y-0 N; Motion passed.				
		<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	<input type="checkbox"/> Y	GO TO "Address by Technical Change Option" subsection
		<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/> N	GO TO "Final" subsection → (E)
		<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)		
<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection				
<b>Technical Change Recommendations</b>						
Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.						
<b>Address by Technical Change Option</b>	1	FROM: Section/Paragraph XXX				
		TO: Section/Paragraph xxx				
		Justification (if necessary)				
	2	FROM: Section/Paragraph XXX				
		TO: Section/Paragraph xxx				
		Justification (if necessary)				
<b>Motion</b>		Negative is addressed by the technical change(s).				
<b>Motion by/2<sup>nd</sup> by</b>		Name (Company)/Name (Company)				
<b>Discussion</b>						
<b>Result of Vote (check one)</b>		XX Y-XX N; Motion passed/failed.				
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection		
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)		
<b>Incorporation of the Technical Change</b>	<b>Motion</b>		To incorporate the technical change(s).			
	<b>Motion by/2<sup>nd</sup> by</b>		Name (Company)/Name (Company)			
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>		XX Y-XX N; Motion passed/failed.			
<input type="checkbox"/>			90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)		
		<input type="checkbox"/>	[Disagree to incorporate.] > 10%	GO TO "Final" subsection → (E)		



Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. ( <i>Regulations ¶ 9.6.4.4.2</i> )		
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”. GO TO “Final” subsection → (D)
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”. GO TO “Final” subsection → (C)
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.
	Motion	The Negative is “not significant”.	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority GO TO “Final” subsection → (D)
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority GO TO “Final” subsection → (C)	
Final	(check if applicable)	<input type="checkbox"/>	(A) Withdrawn (counted under h in disposition)
		<input type="checkbox"/>	(B) Not related (counted under i in disposition)
		<input type="checkbox"/>	(C) Related and not persuasive (significant)
		<input checked="" type="checkbox"/>	(D) Not significant (counted under j in disposition)
		<input type="checkbox"/>	(E) Related and persuasive and not addressed by technical change DOCUMENT FAILS
		<input type="checkbox"/>	(F) Addressed by technical change (counted under k disposition)
	(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.

### Negative 7

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 6.1 General Concept	
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. Examples 3 and 4 in section 12, Target setting would indicate that though the two examples have improved performance their environmental impact is worse. Since the intent of the document is to also allow for performance improvements at the expense of higher energy perhaps the introduction of LCA into the document is not beneficial or at best it is incomplete since the inherent value of higher performance SME is not part of an LCA analysis Proposed Revision (underline is new): Energy is used to produce the various utilities and materials that go into the manufacturing, packaging, shipping, installing, use, decommissioning and disposing of a piece of semiconductor manufacturing SME. <u>Improving the actual or equivalent energy efficiency</u> in any of these life cycles steps <u>may</u> improve the environmental impact of the semiconductor manufacturing SME.	
	TF input (optional)		
	Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter. GO TO “Related” subsection
<input type="checkbox"/>		Withdrawal document received by Standards staff on MM/DD/YYYY. GO TO “Final” subsection → (A)	
at	Motion and Reason	<input checked="" type="checkbox"/>	‘Related’ is mutually agreed upon. (Needs no motion.) GO TO “Persuasive” subsection

	(check one)	<input type="checkbox"/>	Negative is not related. (Needs $\geq 2/3$ votes to pass.)		
			Reason	XXXX	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)			
	Discussion				
Result of Vote (check one)	XX Y-XX N; Motion passed/failed.				
	<input type="checkbox"/>	[Negative is not related.] < 2/3	GO TO "Persuasive" subsection		
	<input type="checkbox"/>	$2/3 \leq$ [Negative is not related.]	GO TO "Final" subsection $\rightarrow$ (B)		
Persuasive	Motion and Reason (check one)	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)		
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs $\geq 2/3$ votes to pass.)		
		Reason	6.1 does not suggest that "energy efficiency improvement" or "improved performance" in any of SME's life cycle stage would improve the energy impact of the SME. Instead, 6.1 specifically and correctly states that reducing the energy used in any of SME's life cycles steps would improve the environmental impact of the SME.		
	Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Kenji Sugihara (Panasonic)			
Discussion	TF considers about the following as a possible future revision Item Add to 6.1. "However, if more energy is used but enables proportionally more productivity or new technologies, this will also improve the environmental impact of the SME."  Is this a new business? Yes it could be.				
Result of Vote (check one)	9 Y-0 N; Motion passed/				
	<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input type="checkbox"/>	Y GO TO "Address by Technical Change Option" subsection
	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N GO TO "Final" subsection $\rightarrow$ (E)
	<input type="checkbox"/>	$2/3 \leq$ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection $\rightarrow$ (C)		
<input checked="" type="checkbox"/>	$90\% \leq$ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection			
Technical Change	<b>Technical Change Recommendations</b> Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.				

Technical Changes	1	FROM: Section/Paragraph <b>XXX</b>		
		TO: Section/Paragraph <b>xxx</b>		
		Justification (if necessary)		
	2	FROM: Section/Paragraph <b>XXX</b>		
		TO: Section/Paragraph <b>xxx</b>		
		Justification (if necessary)		
Motion		Negative is addressed by the technical change(s).		
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
Discussion				
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).] GO TO "Incorporation of the Technical Change" subsection	
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3 GO TO "Final" subsection → (E)	
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).	
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)	
	Discussion			
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.	
<input type="checkbox"/>			90% ≤ [Agree to incorporate.] GO TO "Final" subsection → (F)	
<input type="checkbox"/>			[Disagree to incorporate.] > 10% GO TO "Final" subsection → (E)	
Not Significant Finding Option	This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.4.4.2)			
	Use of "Not significant finding option" (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant". GO TO "Final" subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative "significant". GO TO "Final" subsection → (C)	
		<input type="checkbox"/>	Whether or not the Negative is "not significant" is decided by a vote.	
	Motion		The Negative is "not significant".	
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)	
	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)	
Final	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)	
	<input type="checkbox"/>	(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 and not addressed by technical change
		(F)	Addressed by technical change (counted under k disposition)
(check if applicable)			Comment generated. See Section V-(ii) Comment # X.

### Negative 8

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 6.7 General concept	
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. The term “invested energy” is introduced with no background to its meaning. The document clearly says in “3.2 This Guide focuses <b>only</b> on the <b>use</b> stage of SME life cycle and addresses a limited set of utilities and materials to be considered”. Discussing stages other than the Use Stage of SME is outside the scope of the document. There is no source for the stated 5.4 MJ of “invested energy” and current ITRS guidance is that < 1 kWh/cm2 is achievable. If the source is the citing in Note 11, the Note 11 source it is based upon data from a 1993 study on 6” wafers and the 1997 National Technology roadmap. This source is also speaking of the LCA of a computer chip NOT the LCA of SME. Proposal: Delete Section	
	TF input (optional)		
	Withdrawal (check one)	x	No Negative withdrawal made by Voter. GO TO “Related” subsection
			Withdrawal document received by Standards staff on MM/DD/YYYY. GO TO “Final” subsection → (A)
Related	Motion and Reason (check one)	x	‘Related’ is mutually agreed upon. (Needs no motion.) GO TO “Persuasive” subsection
			Negative is not related. (Needs ≥2/3 votes to pass.)
		Reason	XXXX
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Discussion		
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.	
		[Negative is not related.] < 2/3	GO TO “Persuasive” subsection
		2/3 ≤ [Negative is not related.]	GO TO “Final” subsection → (B)
Persuasive	Motion and Reason (check one)		Negative is related and persuasive. (Needs >1/3 votes to pass.)
		x	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)

		<p>The term “invested energy” is not used. The phrase used is “energy invested in a single semiconductor die”.</p> <p>Current 6.7 is justifiable as “energy invested in a single semiconductor die” is only used to explain how wafer yield improvement would improve effective energy efficiency (i.e. effective number of processed dies per unit of energy used by the SME). 6.7 does not suggest LCA of SME at all.</p> <p>The background of the meaning is explained in 6.7 itself.</p> <p>This guide is indeed focused on the use stage. One possible impact of the use stage is damage to die or wafer(= group of dies). This section helps quantify the impact of a damage event in the use stage in terms of related energy ‘lost’ or ‘wasted’.</p> <p>The whole goal of this 6.7 is to highlight the energy potentially represented in a die from an LCA analysis of making the die.</p> <p>Although the TF did not think that a specific ECF-type value could be agreed upon via ballot, they felt this is an important ‘order of magnitude’ concept to present highlight. Essentially – one of the best things equipment designers can do to improve efficiency is to lessen potential damage to the product (chips) in process.</p> <p>ITRS guidance itself is not a measurement of current capability. It is a goal. The difference between 1 and 1.5 in this order of magnitude concept is insignificant.</p> <p>There is a source stated. See the note (see also excerpt below-which has values above and below 1.5 and is focused only on direct electrical consumption investment, considering the non-direct electrical consumption that must also occur, 1.5 still seems like a reasonable value for order-of-magnitude discussion.</p>		
<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Kenji Sugihara (Panasonic)			
<b>Discussion</b>				
<b>Result of Vote (check one)</b>	9 Y-0 N; Motion passed/.			
	<input type="checkbox"/> [Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	<input type="checkbox"/>	Y
<input type="checkbox"/> [Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N	GO TO “Final” subsection → (E)

		<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)	
		<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection	
Address by Technical Change Option	<b>Technical Change Recommendations</b>				
	Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.				
	Technical Changes	1	FROM: Section/Paragraph XXX		
			TO: Section/Paragraph xxx		
			Justification (if necessary)		
		2	FROM: Section/Paragraph XXX		
			TO: Section/Paragraph xxx		
			Justification (if necessary)		
	Motion		Negative is addressed by the technical change(s).		
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
	Discussion				
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
			<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection
			<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3	GO TO “Final” subsection → (E)
	Incorporation of the Technical Change	Motion		To incorporate the technical change(s).	
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)			
Discussion					
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.			
		<input type="checkbox"/>	90% ≤ [Agree to incorporate.]	GO TO “Final” subsection → (F)	
		<input type="checkbox"/>	[Disagree to incorporate.] > 10%	GO TO “Final” subsection → (E)	
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)				
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.		
Motion		The Negative is “not significant”.			

	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority GO TO "Final" subsection → (D)
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority GO TO "Final" subsection → (C)	
Final	(check if applicable)	<input type="checkbox"/>	(A) Withdrawn (counted under h in disposition)
		<input type="checkbox"/>	(B) Not related (counted under i in disposition)
		<input type="checkbox"/>	(C) Related and not persuasive (significant)
		<input checked="" type="checkbox"/>	(D) Not significant (counted under j in disposition)
		<input type="checkbox"/>	(E) Related and persuasive and not addressed by technical change DOCUMENT FAILS
	<input type="checkbox"/>	(F) Addressed by technical change (counted under k disposition)	
(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.	

### Negative 9

	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. Note 11 in General concept	
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. With deletion of Section 6.7 why not remove all references to LCA. LCA is not part of the purpose of the document and no LCA techniques are used. The cited document while published in 2002 references data from as far back as 1993. The publication also attributes the major environmental impact to stages other than the Use stage in particular the production of processing chemicals and the Use stage of the Chip not the machine. Introduction of a document that is both dated and unsupported by additional research on LCA of semiconductor devices should not be referenced. LCA is a technique used to assess the environmental impact of SME throughout its life cycle, including raw material procurement, manufacturing, transportation, use and disposal. LCA in and of itself does not evaluate the environmental impact but only assesses the impact. The evaluation of the impact is done after LCA is completed	
TF input (optional)			
	Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter. GO TO "Related" subsection
		<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY. GO TO "Final" subsection → (A)
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.) GO TO "Persuasive" subsection
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)
	Reason	XXXX	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)	
Discussion			
Result of Vote		XX Y-XX N; Motion passed/failed.	

	<b>(check one)</b>	<input type="checkbox"/>	[Negative is not related.] < 2/3			GO TO “Persuasive” subsection	
		<input type="checkbox"/>	2/3 ≤ [Negative is not related.]			GO TO “Final” subsection → (B)	
<b>Persuasive</b>	<b>Motion and Reason (check one)</b>	<input type="checkbox"/>	Negative is related and persuasive. <b>(Needs &gt;1/3 votes to pass.)</b>				
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. <b>(Needs ≥2/3 votes to pass.)</b>				
			Reason	<p>Negative is baseless deletion of Section 6.7 is not balloted</p> <p>LCA remains a high level concept in S23 that is important to understanding the energy efficiency of SME – see 6.1. Mentioning it invites readers to consider other stages that might be relevant to practical energy savings, but as 6.2 points out, only the use stage can be practically addressed more specifically in the industry with a guide at this time.</p> <p>Some of the submitter’s comments are nearly exactly the same as 6.1.</p> <p>It is not clear how ‘evaluation’ is fundamentally different from ‘assessment</p>			
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Kenji Sugihara (Panasonic)					
	<b>Discussion</b>						
	<b>Result of Vote (check one)</b>	9 Y-0 N; Motion passed					
		<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	<input type="checkbox"/>	Y	GO TO “Address by Technical Change Option” subsection
		<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N	GO TO “Final” subsection → (E)
		<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)			
		<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection			
<b>Address by Technical Change Option</b>	<b>Technical Change Recommendations</b>						
	Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.						
	1	FROM: Section/Paragraph XXX					
		TO: Section/Paragraph xxx					
2	Justification <b>(If necessary)</b>						
	FROM: Section/Paragraph XXX						



		TO: Section/Paragraph xxx	
		Justification (if necessary)	
	Motion	Negative is addressed by the technical change(s).	
	Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Discussion		
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.	
		<input type="checkbox"/> 2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection
		<input type="checkbox"/> [Negative is not addressed by the technical change(s).] < 2/3	GO TO “Final” subsection → (E)
Incorporation of the Technical Change	Motion	To incorporate the technical change(s).	
	Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Discussion		
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.	
		<input type="checkbox"/> 90% ≤ [Agree to incorporate.]	GO TO “Final” subsection → (F)
<input type="checkbox"/> [Disagree to incorporate.] > 10%	GO TO “Final” subsection → (E)		
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)		
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/> It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)
		<input type="checkbox"/> It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)
		<input type="checkbox"/> Whether or not the Negative is “not significant” is decided by a vote.	
	Motion	The Negative is “not significant”.	
	Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Vote	<input type="checkbox"/> XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)
<input type="checkbox"/> XX Y-XX N; Motion failed with simple majority		GO TO “Final” subsection → (C)	
Final	<input type="checkbox"/> (A)	Withdrawn (counted under h in disposition)	
	<input type="checkbox"/> (B)	Not related (counted under i in disposition)	
	<input type="checkbox"/> (C)	Related and not persuasive (significant)	
	<input checked="" type="checkbox"/> (D)	Not significant (counted under j in disposition)	
	<input type="checkbox"/> (E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
	<input type="checkbox"/> (F)	Addressed by technical change (counted under k disposition)	
(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.	

## Negative 10

<b>Negative</b>	Referenced Section/ Paragraph	<b>*TF/TC Chapter to fill in, including text in the ballot if necessary.</b>				
	Negative Text	6.5 General concept <b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b> Negative. The term “equivalent power values” is not defined. The ECF is used to provide “equivalent energy” for utilities; as such the results should be reported as equivalent energy values. Proposed Solution: Replace “equivalent power values” with “equivalent energy values”.				
TF input (optional)						
<b>Withdrawal (check one)</b>	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO “Related” subsection		
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO “Final” subsection → (A)		
<b>Related</b>	<b>Motion and Reason (check one)</b>	<input checked="" type="checkbox"/>	‘Related’ is mutually agreed upon. (Needs no motion.)		GO TO “Persuasive” subsection	
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)			
		Reason	XXXX			
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)				
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.				
	<input type="checkbox"/>	[Negative is not related.] < 2/3		GO TO “Persuasive” subsection		
	<input type="checkbox"/>	2/3 ≤ [Negative is not related.]		GO TO “Final” subsection → (B)		
<b>Persuasive</b>	<b>Motion and Reason (check one)</b>	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)			
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			
		Reason	RNP Lack of definition is justified as equivalent power values can be easily understood in the context the term is used. (See title of section 9 for example)			
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Kenji Sugihara (Panasonic)				
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	9 Y-0 N; Motion passed/				
	<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input type="checkbox"/>	Y GO TO “Address by Technical Change Option” subsection	
	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N GO TO “Final” subsection → (E)	
	<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)			

		x	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection	
Address by Technical Change Option	<b>Technical Change Recommendations</b>				
	Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.				
	1	Technical Changes	FROM: Section/Paragraph XXX		
			TO: Section/Paragraph xxx		
	Justification (if necessary)				
	2	FROM: Section/Paragraph XXX			
		TO: Section/Paragraph xxx			
	Justification (if necessary)				
	Motion		Negative is addressed by the technical change(s).		
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
Discussion					
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.			
		2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection		
		[Negative is not addressed by the technical change(s).] < 2/3	GO TO “Final” subsection → (E)		
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).		
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
	Discussion				
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
		90% ≤ [Agree to incorporate.]	GO TO “Final” subsection → (F)		
		[Disagree to incorporate.] > 10%	GO TO “Final” subsection → (E)		
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)				
	Use of “Not significant finding option” (check one)	x	It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)	
			It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)	
			Whether or not the Negative is “not significant” is decided by a vote.		
	Motion		The Negative is “not significant”.		
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)			

	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)
		<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)
Final	(check if applicable)	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)
		<input type="checkbox"/>	(B)	Not related (counted under i in disposition)
		<input type="checkbox"/>	(C)	Related and not persuasive (significant)
		<input checked="" type="checkbox"/>	(D)	Not significant (counted under j in disposition)
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change
	<input type="checkbox"/>	(F)	Addressed by technical change (counted under k disposition)	
	(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.	

### Negative 11

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.			
		<p style="text-align: center;">Note 12 in Baseline Process Note 13 in Baseline Process</p>			
Negative	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.			
		<p>This note goes against the intention of the standard to provide the suppliers with guidelines and methodology to go about assessing and improving energy efficiency for their own next generation equipment. Suppliers typically do not release information that could be used for meaningful comparison as such the comparison is likely apple to orange.</p> <p>Proposed Solution: remove this section as it does not contribute any guidance for suppliers on energy conservation or improving equipment energy efficiency.</p>			
TF input (optional)					
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO "Related" subsection	
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO "Final" subsection → (A)	
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)		
		<input type="checkbox"/>	Reason	XXXX	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)			
	Discussion				
Result of Vote (check one)	XX Y-XX N; Motion passed/failed.				
	<input type="checkbox"/>	[Negative is not related.] < 2/3		GO TO "Persuasive" subsection	
	<input type="checkbox"/>	2/3 ≤ [Negative is not related.]		GO TO "Final" subsection → (B)	
Motion and Reason	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)			

Persuasive	<b>(check one)</b>		<input checked="" type="checkbox"/>	Negative is related and not persuasive. <b>(Needs ≥2/3 votes to pass.)</b>		
	Reason			NOTE 12 and NOTE13 are merely statement a fact that could be useful for suppliers to know what user would like to know Purpose of this Guide is not making any distinction between what is benefit to users and to suppliers. Question of whether this information is released by equipment suppliers is addressed in 3.4.		
	Motion by/ 2 <sup>nd</sup> by		George Hoshi (Tokyo Electron)/Kenji Sugihara (Panasonic)			
	Discussion					
	Result of Vote <b>(check one)</b>		9 Y-0 N; Motion passed.			
		<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? <b>(check one)</b>	<input type="checkbox"/>	Y GO TO "Address by Technical Change Option" subsection
		<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N GO TO "Final" subsection → (E)
		<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)		
		<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection		
Address by Technical Change Option	<b>Technical Change Recommendations</b>					
	Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.					
	1	FROM: Section/Paragraph XXX				
		TO: Section/Paragraph xxx				
		Justification (if necessary)				
	2	FROM: Section/Paragraph XXX				
		TO: Section/Paragraph xxx				
		Justification (if necessary)				
	Motion		Negative is addressed by the technical change(s).			
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)			
Discussion						
Result of Vote <b>(check one)</b>		XX Y-XX N; Motion passed/failed.				
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection		
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)		

	Incorporation of the Technical Change	Motion	To incorporate the technical change(s).	
		Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
		Discussion		
		Result of Vote (check one)	XX Y-XX N; Motion passed/failed.	
<input type="checkbox"/>	90% ≤ [Agree to incorporate.]		GO TO “Final” subsection → (F)	
	<input type="checkbox"/>	[Disagree to incorporate.]>10%	GO TO “Final” subsection → (E)	
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)			
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)
		<input type="checkbox"/> Whether or not the Negative is “not significant” is decided by a vote.		
	Motion	The Negative is “not significant”.		
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)		
Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)	
	<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority	GO TO “Final” subsection → (C)	
Final	(check if applicable)	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)
		<input type="checkbox"/>	(B)	Not related (counted under i in disposition)
		<input type="checkbox"/>	(C)	Related and not persuasive (significant)
		<input checked="" type="checkbox"/>	(D)	Not significant (counted under j in disposition)
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change
	<input type="checkbox"/>	(F)	Addressed by technical change (counted under k disposition)	
(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.		
<b>Negative 12</b>				
Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. Note 16 Utilities and Materials Use Rate Measurement		
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. If there is a transition between idle and process mode, then it needs to be defined and quantified. If the transition is assumed to be insignificant then need to provide rationale for the assumption. Proposed Solution: Remove Note 16		
TF input (optional)				
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO “Related” subsection
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO “Final” subsection → (A)

Related	Motion and Reason (check one)	X	‘Related’ is mutually agreed upon. (Needs no motion.)		GO TO “Persuasive” subsection	
			Negative is not related. (Needs ≥2/3 votes to pass.)			
			Reason	XXXX		
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)				
	Discussion					
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.				
		[Negative is not related.] < 2/3			GO TO “Persuasive” subsection	
		2/3 ≤ [Negative is not related.]			GO TO “Final” subsection → (B)	
Persuasive	Motion and Reason (check one)		Negative is related and persuasive. (Needs >1/3 votes to pass.)			
		x	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			
			Reason	The Negative is requesting a rationale for the NOTE. It is not generally required in SEMI Standards to provide rationale for every statement in NOTE. Editorial change to the NOTE to add an explanatory text; “because the time of transition is small (by definition, less than 15 seconds)” after significant would provide rationale requested by the voter.		
	Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Kenji Sugihara (Panasonic)				
	Discussion	TF recommends editorial change suggested above. TF recommendation is acceptable. It is better to change the wording as follows. “because the transition time is short (by definition, less than 15 seconds)”				
	Result of Vote (check one)	9 Y-0 N; Motion passed.				
		[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)		Y	GO TO “Address by Technical Change Option” subsection
		[Negative is related and not persuasive.] < 2/3			N	GO TO “Final” subsection → (E)
		2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)			
	x	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection			
Technical Change	<b>Technical Change Recommendations</b>					
	Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.					
	FROM: Section/Paragraph XXX					

	2	TO: Section/Paragraph <b>xxx</b>		
		Justification (if necessary)		
		FROM: Section/Paragraph <b>XXX</b>		
		TO: Section/Paragraph <b>xxx</b>		
		Justification (if necessary)		
Motion		Negative is addressed by the technical change(s).		
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
Discussion				
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/> 2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection	
		<input type="checkbox"/> [Negative is not addressed by the technical change(s).] < 2/3	GO TO “Final” subsection → (E)	
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).	
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)	
	Discussion			
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.	
<input type="checkbox"/> 90% ≤ [Agree to incorporate.]			GO TO “Final” subsection → (F)	
		<input type="checkbox"/> [Disagree to incorporate.] > 10%	GO TO “Final” subsection → (E)	
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)			
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/> It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)	
		<input type="checkbox"/> It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)	
			Whether or not the Negative is “not significant” is decided by a vote.	
	Motion		The Negative is “not significant”.	
	Motion by/ 2 <sup>nd</sup> by		Name (Company)/Name (Company)	
Vote	<input type="checkbox"/> XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)		
	<input type="checkbox"/> XX Y-XX N; Motion failed with simple majority	GO TO “Final” subsection → (C)		
Final (check if applicable)	<input type="checkbox"/> (A)	Withdrawn (counted under h in disposition)		
	<input type="checkbox"/> (B)	Not related (counted under i in disposition)		
	<input type="checkbox"/> (C)	Related and not persuasive (significant)		



		<input checked="" type="checkbox"/>	<b>(D)</b>	Not significant <b>(counted under j in disposition)</b>
		<input type="checkbox"/>	<b>(E)</b>	Related and persuasive and not addressed by technical change
		<input type="checkbox"/>	<b>(F)</b>	Addressed by technical change <b>(counted under k disposition)</b>
	<b>(check if applicable)</b>	<input checked="" type="checkbox"/>	<b>Comment generated. See Section V-(ii) Comment # NC-1.</b>	

### Negative 13

<b>Negative</b>	<b>Referenced Section/ Paragraph</b>	<b>*TF/TC Chapter to fill in, including text in the ballot if necessary.</b>		
		8.4.3 Utilities and Materials Use Rate Measurement		
	<b>Negative Text</b>	<b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b> See AMAT4 for "rest mode". Measuring utilities consumption for separate transitions is useless as data used for S23 calculation and reporting is the average utilities consumption values for each of the cycles. Justification or rational not provided for the prescriptive procedures as to why it need to repeat 3 times, why not 10, 20 etc.. It should be left to the suppliers to decide when to repeat a test and this is costly and time consuming for suppliers. Proposed Solution: Remove section 8.4.3		
	<b>TF input (optional)</b>			
	<b>Withdrawal (check one)</b>	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.	<b>GO TO "Related" subsection</b>
		<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.	<b>GO TO "Final" subsection → (A)</b>
<b>Related</b>	<b>Motion and Reason (check one)</b>	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. <b>(Needs no motion.)</b>	<b>GO TO "Persuasive" subsection</b>
		<input type="checkbox"/>	Negative is not related. <b>(Needs ≥2/3 votes to pass.)</b>	
		<input type="checkbox"/>	Reason	XXXX
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)		
	<b>Discussion</b>			
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/>	[Negative is not related.] < 2/3	<b>GO TO "Persuasive" subsection</b>
		<input type="checkbox"/>	2/3 ≤ [Negative is not related.]	<b>GO TO "Final" subsection → (B)</b>
<b>Persuasive</b>	<b>Motion and Reason (check one)</b>	<input type="checkbox"/>	Negative is related and persuasive. <b>(Needs &gt;1/3 votes to pass.)</b>	
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. <b>(Needs ≥2/3 votes to pass.)</b>	

						<p>Measuring parameters during the mode transition is not considered useless by the TF as evident in ¶11.5.6. In particular during the transition from a lower energy use rate condition to idle, significant amounts of energy can be consumed in this phase (e.g., such as to re-heat chambers or re-cool cryopumps).</p> <p>It is true rational for 3 is not provided in the document, but rationale for most SEMI Safety Guidelines is not provided, and is generally not found as a persuasive reason not to publish the criteria (i.e. understanding the rationale for a criteria does not significantly impact one's ability to conform to the criteria).</p>																								
						<p><b>Reason</b></p>																								
						<p><b>Motion by/ 2<sup>nd</sup> by</b> George Hoshi (Tokyo Electron)/Moray Crawford(Hatsuta)</p>																								
						<p><b>Discussion</b> TF suggests an editorial change for clarification At least three separate measurements should be taken of each parameter in each period. Those values should be averaged for each parameter for each period.</p>																								
						<p>8 Y-0 N; Motion passed/failed.</p>																								
						<table border="1"> <tr> <td rowspan="4"><b>Result of Vote (check one)</b></td> <td><input type="checkbox"/></td> <td>[Negative is related and persuasive.] &gt; 1/3</td> <td rowspan="2"><b>Is a technical change recommended? (check one)</b></td> <td><input type="checkbox"/></td> <td>Y</td> <td>GO TO "Address by Technical Change Option" subsection</td> </tr> <tr> <td><input type="checkbox"/></td> <td>[Negative is related and not persuasive.] &lt; 2/3</td> <td><input type="checkbox"/></td> <td>N</td> <td>GO TO "Final" subsection → (E)</td> </tr> <tr> <td><input type="checkbox"/></td> <td>2/3 ≤ [Negative is related and not persuasive.] &lt; 90%</td> <td colspan="4">GO TO "Final" subsection → (C)</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>90% ≤ [Negative is related and not persuasive.]</td> <td colspan="4">GO TO "Not Significant Finding Option" subsection</td> </tr> </table>	<b>Result of Vote (check one)</b>	<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	<input type="checkbox"/>	Y	GO TO "Address by Technical Change Option" subsection	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3	<input type="checkbox"/>	N	GO TO "Final" subsection → (E)	<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)				<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection			
<b>Result of Vote (check one)</b>	<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	<input type="checkbox"/>	Y	GO TO "Address by Technical Change Option" subsection																								
	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N	GO TO "Final" subsection → (E)																								
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	<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection																											
<b>Address by Technical Change Option</b>	<b>Technical Change Recommendations</b>																													
	Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.																													
	<b>Technical Changes</b>	1	FROM: Section/Paragraph XXX																											
		1	TO: Section/Paragraph xxx																											
			Justification (if necessary)																											
		2	FROM: Section/Paragraph XXX																											

		TO: Section/Paragraph xxx	
		Justification (if necessary)	
	Motion	Negative is addressed by the technical change(s).	
	Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Discussion		
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.	
		<input type="checkbox"/> 2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection
		<input type="checkbox"/> [Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)
Incorporation of the Technical Change	Motion	To incorporate the technical change(s).	
	Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Discussion		
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.	
		<input type="checkbox"/> 90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)
<input type="checkbox"/> [Disagree to incorporate.] > 10%	GO TO "Final" subsection → (E)		
Not Significant Finding Option	This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.4.4.2)		
	Use of "Not significant finding option" (check one)	<input checked="" type="checkbox"/> It is mutually agreed upon to term the Negative "not significant".	GO TO "Final" subsection → (D)
		<input type="checkbox"/> It is mutually agreed upon to term the Negative "significant".	GO TO "Final" subsection → (C)
		<input type="checkbox"/> Whether or not the Negative is "not significant" is decided by a vote.	
	Motion	The Negative is "not significant".	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Vote	<input type="checkbox"/> XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)
<input type="checkbox"/> XX Y-XX N; Motion failed with simple majority		GO TO "Final" subsection → (C)	
Final	<input type="checkbox"/> (A)	Withdrawn (counted under h in disposition)	
	<input type="checkbox"/> (B)	Not related (counted under i in disposition)	
	<input type="checkbox"/> (C)	Related and not persuasive (significant)	
	<input checked="" type="checkbox"/> (D)	Not significant (counted under j in disposition)	
	<input type="checkbox"/> (E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
	<input type="checkbox"/> (F)	Addressed by technical change (counted under k disposition)	
(check if applicable)	<input checked="" type="checkbox"/>	Comment generated. See Section V-(ii) Comment # NC-2	

Negative 14

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 8.4.4 Utilities and Materials Use Rate Measurement				
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. See AMAT13 Proposed Solution: Remove section 8.4.3				
TF input (optional)						
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO "Related" subsection		
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO "Final" subsection → (A)		
Related	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection		
		Negative is not related. (Needs ≥2/3 votes to pass.)				
		Reason	XXXX			
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)				
	Discussion					
Result of Vote (check one)	<input type="checkbox"/>	[Negative is not related.] < 2/3		GO TO "Persuasive" subsection		
	<input type="checkbox"/>	2/3 ≤ [Negative is not related.]		GO TO "Final" subsection → (B)		
Motion and Reason (check one)	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)				
	<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)				
		Reason	No rational or proposal is provided for the paragraph to which this Negative is submitted (i.e., ¶ 8.4.4). They refer only 8.4.3.			
Persuasive	Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford(Hatsuta)				
	Discussion					
	Result of Vote (check one)	8 Y-0 N; Motion passed.				
		<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input type="checkbox"/>	Y GO TO "Address by Technical Change Option" subsection
<input type="checkbox"/>		[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N GO TO "Final" subsection → (E)	
<input type="checkbox"/>		2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)			
<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection				

		<b>Technical Change Recommendations</b>		
		Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.		
Address by Technical Change Option	Technical Changes	1	FROM: Section/Paragraph XXX	
			TO: Section/Paragraph xxx	
			Justification (if necessary)	
		2	FROM: Section/Paragraph XXX	
			TO: Section/Paragraph xxx	
			Justification (if necessary)	
Motion		Negative is addressed by the technical change(s).		
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
Discussion				
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).] GO TO “Incorporation of the Technical Change” subsection	
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3 GO TO “Final” subsection → (E)	
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).	
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)	
	Discussion			
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.	
<input type="checkbox"/>			90% ≤ [Agree to incorporate.] GO TO “Final” subsection → (F)	
<input type="checkbox"/>			[Disagree to incorporate.] > 10% GO TO “Final” subsection → (E)	
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)			
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”. GO TO “Final” subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”. GO TO “Final” subsection → (C)	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.	
	Motion		The Negative is “not significant”.	
	Motion by/ 2 <sup>nd</sup> by		Name (Company)/Name (Company)	
Vote		<input type="checkbox"/> XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)	

			XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)
Final	(check if applicable)		(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 and not addressed by technical change
		(F)	Addressed by technical change (counted under k disposition)	
(check if applicable)		Comment generated. See Section V-(ii) Comment # X.		

### Negative 15

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 8.6.1 Annual Estimated Energy Consumption			
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. Why 2 hours period? Need to provide rationale on this prescriptive determination/procedure. This should be left to suppliers to decide how to divide the time between idle or sleep (part of the idle time) depending on the type of SME and associated process constraints. Also "free time" term introduced with no prior introduction or definition. It is implied that "free time" = Idle + sleep + rest Proposed Solution: Revised to read: "For reporting annual estimated equivalent energy consumption, account for 24 hours a day, 365 days a year (for a total of 8,760 hours of opportunity) with 5% (438 hours) as down time, 70% (6,132 hours) spent in process mode, and 25% (2190 hours/year) of idle time which include sleep time (if such function is provided) according to the capabilities of the SME."			
TF input (optional)					
Withdrawal (check one)	X	No Negative withdrawal made by Voter.		GO TO "Related" subsection	
		Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO "Final" subsection → (A)	
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection
			Negative is not related. (Needs ≥2/3 votes to pass.)		
		Reason	XXXX		
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)			
	Discussion				
Result of Vote (check one)	XX Y-XX N; Motion passed/failed.				
		[Negative is not related.] < 2/3		GO TO "Persuasive" subsection	
	2/3 ≤ [Negative is not related.]		GO TO "Final" subsection → (B)		
Motion and Reason		Negative is related and persuasive. (Needs >1/3 votes to pass.)			

<b>Persuasive</b>	<b>(check one)</b>	<input checked="" type="checkbox"/>	Negative is related and not persuasive. <b>(Needs ≥2/3 votes to pass.)</b>			
			<b>Reason</b>	The rationale to have definite number is to standardize the process of calculating annual equivalent energy use estimate. It is true rational for 2 hours is not provided in the document, but rationale for most SEMI S series Documents is not provided, and is generally not found as a persuasive reason not to publish the criteria (i.e. understanding the rationale for a criteria does not significantly impact one's ability to conform to the criteria).		
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)				
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	8 Y-0 N; Motion passed.				
	<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	<input type="checkbox"/>	Y	<b>GO TO "Address by Technical Change Option" subsection</b>
	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N	<b>GO TO "Final" subsection → (E)</b>
	<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	<b>GO TO "Final" subsection → (C)</b>			
	<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	<b>GO TO "Not Significant Finding Option" subsection</b>			
<b>Address by Technical Change Option</b>	<b>Technical Change Recommendations</b>					
	Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.					
	<b>1</b>	<b>FROM: Section/Paragraph XXX</b>				
		<b>TO: Section/Paragraph xxx</b>				
		<b>Justification (If necessary)</b>				
	<b>2</b>	<b>FROM: Section/Paragraph XXX</b>				
<b>TO: Section/Paragraph xxx</b>						
<b>Justification (If necessary)</b>						
<b>Motion</b>	Negative is addressed by the technical change(s).					
<b>Motion by/2<sup>nd</sup> by</b>	Name (Company)/Name (Company)					
<b>Discussion</b>						
<b>Result of Vote</b>	XX Y-XX N; Motion passed/failed.					

	<b>(check one)</b>		<input type="checkbox"/> 2/3 ≤ [Negative is addressed by the technical change(s).]	<b>GO TO “Incorporation of the Technical Change” subsection</b>	
			<input type="checkbox"/> [Negative is not addressed by the technical change(s).] < 2/3	<b>GO TO “Final” subsection → (E)</b>	
	<b>Incorporation of the Technical Change</b>	<b>Motion</b>	To incorporate the technical change(s).		
		<b>Motion by/2<sup>nd</sup> by</b>	Name (Company)/Name (Company)		
		<b>Discussion</b>			
		<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.		
<input type="checkbox"/>	90% ≤ [Agree to incorporate.]		<b>GO TO “Final” subsection → (F)</b>		
<input type="checkbox"/>	[Disagree to incorporate.] > 10%		<b>GO TO “Final” subsection → (E)</b>		
<b>Not Significant Finding Option</b>	<b>This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)</b>				
	<b>Use of “Not significant finding option” (check one)</b>	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”.	<b>GO TO “Final” subsection → (D)</b>	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”.	<b>GO TO “Final” subsection → (C)</b>	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.		
	<b>Motion</b>	The Negative is “not significant”.			
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)			
	<b>Vote</b>	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	<b>GO TO “Final” subsection → (D)</b>	
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	<b>GO TO “Final” subsection → (C)</b>		
<b>Final</b>	<b>(check if applicable)</b>	<input type="checkbox"/>	<b>(A)</b>	Withdrawn (counted under h in disposition)	
		<input type="checkbox"/>	<b>(B)</b>	Not related (counted under i in disposition)	
		<input type="checkbox"/>	<b>(C)</b>	Related and not persuasive (significant)	
		<input checked="" type="checkbox"/>	<b>(D)</b>	Not significant (counted under j in disposition)	
		<input type="checkbox"/>	<b>(E)</b>	Related and persuasive and not addressed by technical change	<b>DOCUMENT FAILS</b>
		<input type="checkbox"/>	<b>(F)</b>	Addressed by technical change (counted under k disposition)	
	<b>(check if applicable)</b>	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.		

### Negative 16

<b>Negative</b>	<b>Referenced Section/ Paragraph</b>	<b>*TF/TC Chapter to fill in, including text in the ballot if necessary.</b>		
		8.6.2 Annual Estimated Energy Consumption		
<b>Negative</b>	<b>Negative Text</b>	<b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b>		
		Negative. See AMAT4 and AMAT13 Proposed Solution: Delete “¶8.4.3”		
<b>TF input (optional)</b>				
<b>Withdrawal (check one)</b>	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.	<b>GO TO “Related” subsection</b>	



		Withdrawal document received by Standards staff on MM/DD/YYYY.	GO TO “Final” subsection → (A)	
Related	Motion and Reason (check one)	X	‘Related’ is mutually agreed upon. (Needs no motion.) GO TO “Persuasive” subsection	
			Negative is not related. (Needs ≥2/3 votes to pass.)	
		Reason	XXXX	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)		
	Discussion			
Result of Vote (check one)	XX Y-XX N; Motion passed/failed.			
		[Negative is not related.] < 2/3	GO TO “Persuasive” subsection	
		2/3 ≤ [Negative is not related.]	GO TO “Final” subsection → (B)	
Persuasive	Motion and Reason (check one)		Negative is related and persuasive. (Needs >1/3 votes to pass.)	
		x	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)	
		Reason	The Negative does not identify what the perceived problem is. Proposal from the submitter about how to address this Negative on ¶8.6.2 references only 8.4.3.	
	Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)		
	Discussion			
Result of Vote (check one)	8 Y-0 N; Motion passed			
		[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	Y GO TO “Address by Technical Change Option” subsection
		[Negative is related and not persuasive.] < 2/3		N GO TO “Final” subsection → (E)
		2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)	
	x	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection	
Address by Technical Change Option	Technical Change Recommendations			
	Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.			
	Technical Changes	1	FROM: Section/Paragraph XXX	
		TO: Section/Paragraph xxx		
		Justification (if necessary)		

	2	FROM: Section/Paragraph <b>XXX</b>		
		TO: Section/Paragraph <b>xxx</b>		
		Justification (if necessary)		
Motion		Negative is addressed by the technical change(s).		
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
Discussion				
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).] GO TO "Incorporation of the Technical Change" subsection	
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3 GO TO "Final" subsection → (E)	
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).	
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)	
	Discussion			
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.	
<input type="checkbox"/>			90% ≤ [Agree to incorporate.] GO TO "Final" subsection → (F)	
<input type="checkbox"/>			[Disagree to incorporate.] > 10% GO TO "Final" subsection → (E)	
Not Significant Finding Option	This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.4.4.2)			
	Use of "Not significant finding option" (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant". GO TO "Final" subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative "significant". GO TO "Final" subsection → (C)	
		<input type="checkbox"/> Whether or not the Negative is "not significant" is decided by a vote.		
	Motion		The Negative is "not significant".	
	Motion by/ 2 <sup>nd</sup> by		Name (Company)/Name (Company)	
	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)	
Final	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)	
	<input type="checkbox"/>	(B)	Not related (counted under i in disposition)	
	<input type="checkbox"/>	(C)	Related and not persuasive (significant)	
	<input checked="" type="checkbox"/>	(D)	Not significant (counted under j in disposition)	
	<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
	<input type="checkbox"/>	(F)	Addressed by technical change (counted under k disposition)	

	<b>(check if applicable)</b>		Comment generated. <b>See Section V-(ii) Comment # X.</b>
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**Negative 17**

<b>Negative</b>	<b>Referenced Section/ Paragraph</b>	<b>*TF/TC Chapter to fill in, including text in the ballot if necessary.</b>				
		8.6.3 Annual Estimated Consumption				
	<b>Negative Text</b>	<b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b>				
		See AMAT15 Proposed Solution: Delete Section 8.6.3 and corresponding Figure 1				
<b>TF input (optional)</b>						
<b>Withdrawal (check one)</b>	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		<b>GO TO "Related" subsection</b>		
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		<b>GO TO "Final" subsection → (A)</b>		
<b>Related</b>	<b>Motion and Reason (check one)</b>	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. <b>(Needs no motion.)</b>		<b>GO TO "Persuasive" subsection</b>	
		<input type="checkbox"/>	Negative is not related. <b>(Needs ≥2/3 votes to pass.)</b>			
			<b>Reason</b>	XXXX		
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)				
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	<input type="checkbox"/>	[Negative is not related.] < 2/3		<b>GO TO "Persuasive" subsection</b>	
	<input type="checkbox"/>	2/3 ≤ [Negative is not related.]		<b>GO TO "Final" subsection → (B)</b>		
<b>Persuasive</b>	<b>Motion and Reason (check one)</b>	<input type="checkbox"/>	Negative is related and persuasive. <b>(Needs &gt;1/3 votes to pass.)</b>			
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. <b>(Needs ≥2/3 votes to pass.)</b>			
			<b>Reason</b>	The Negative does not identify what the perceived problem is. Proposal from the submitter about how to address this Negative on ¶8.6.3 references only ¶8.4.3.		
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)				
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	8 Y-0 N; Motion passed				
	<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	<input type="checkbox"/>	Y	<b>GO TO "Address by Technical Change Option" subsection</b>
	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N	<b>GO TO "Final" subsection → (E)</b>
	<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	<b>GO TO "Final" subsection → (C)</b>			

		x	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection	
Address by Technical Change Option	<b>Technical Change Recommendations</b>				
	Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.				
	1	Technical Changes	FROM: Section/Paragraph XXX		
			TO: Section/Paragraph xxx		
			Justification (if necessary)		
	2	Technical Changes	FROM: Section/Paragraph XXX		
			TO: Section/Paragraph xxx		
			Justification (if necessary)		
	Motion		Negative is addressed by the technical change(s).		
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
	Discussion				
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
		2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection		
		[Negative is not addressed by the technical change(s).] < 2/3	GO TO “Final” subsection → (E)		
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).		
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
	Discussion				
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
		90% ≤ [Agree to incorporate.]	GO TO “Final” subsection → (F)		
		[Disagree to incorporate.] > 10%	GO TO “Final” subsection → (E)		
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)				
	Use of “Not significant finding option” (check one)	x	It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)	
			It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)	
			Whether or not the Negative is “not significant” is decided by a vote.		
	Motion		The Negative is “not significant”.		
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)			

	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)
		<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)
Final	(check if applicable)	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)
		<input type="checkbox"/>	(B)	Not related (counted under i in disposition)
		<input type="checkbox"/>	(C)	Related and not persuasive (significant)
		<input checked="" type="checkbox"/>	(D)	Not significant (counted under j in disposition)
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change
	<input type="checkbox"/>	(F)	Addressed by technical change (counted under k disposition)	
	(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.	

### Negative 18

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 9 & 9.1 Conversion Factors for Equivalent Energy and Power		
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. There is no foundation within the document for the introduction of the term Equivalent Power as all of the ECFs are based upon Equivalent Energy ECF is used for convert utilities into equivalent energy consumption so the section needs to include equivalent energy not equivalent power. Proposed Solution: Delete the word "Power" from the title and revise the sentence to read " ... recipe into equivalent energy or power consumption data." All units of ECFs are Energy/Unit Volume or Energy, there is no power in the ECFs.		
TF input (optional)				
	Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.	GO TO "Related" subsection
		<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.	GO TO "Final" subsection → (A)
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.)	
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)	
		Reason	XXXX	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)		
	Discussion			
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/>	[Negative is not related.] < 2/3	GO TO "Persuasive" subsection
		<input type="checkbox"/>	2/3 ≤ [Negative is not related.]	GO TO "Final" subsection → (B)
Persuasive	Motion and Reason (check one)	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)	
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)	

		Reason	The conversion between energy and power requires only a basic understanding of physics. All qualitative statements about power are true for energy once a relevant time period is defined. A basic goal of the document is energy efficiency analysis.. Power is the use rate of energy.			
	Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)				
	Discussion					
	Result of Vote (check one)	8 Y-0 N; Motion passed				
		<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input type="checkbox"/>	Y GO TO "Address by Technical Change Option" subsection
		<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N GO TO "Final" subsection → (E)
		<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)		
	<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection			
Address by Technical Change Option	<b>Technical Change Recommendations</b>					
	Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.					
	1	FROM: Section/Paragraph XXX				
		TO: Section/Paragraph xxx				
		Justification (if necessary)				
	2	FROM: Section/Paragraph XXX				
		TO: Section/Paragraph xxx				
		Justification (if necessary)				
	Motion		Negative is addressed by the technical change(s).			
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)			
Discussion						
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.				
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection		
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)		
Incorporation	Motion		To incorporate the technical change(s).			
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)			

		Discussion		
		Result of Vote (check one)	XX Y-XX N; Motion passed/failed. <input type="checkbox"/> 90% ≤ [Agree to incorporate.] GO TO “Final” subsection → (F) <input type="checkbox"/> [Disagree to incorporate.]>10% GO TO “Final” subsection → (E)	
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)			
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”. GO TO “Final” subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”. GO TO “Final” subsection → (C)	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.	
	Motion	The Negative is “not significant”.		
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)		
Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)	
	<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority	GO TO “Final” subsection → (C)	
Final	(check if applicable)	<input type="checkbox"/>	(A) Withdrawn (counted under h in disposition)	
		<input type="checkbox"/>	(B) Not related (counted under i in disposition)	
		<input type="checkbox"/>	(C) Related and not persuasive (significant)	
		<input checked="" type="checkbox"/>	(D) Not significant (counted under j in disposition)	
		<input type="checkbox"/>	(E) Related and persuasive and not addressed by technical change	DOCUMENT FAILS
		<input type="checkbox"/>	(F) Addressed by technical change (counted under k disposition)	
	(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.	

### Negative 19

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. Table 3 Recommended Energy Conversion Factors, Water Cooled by Refrigeration	
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. Table 3 is for ECF all based on flow. While the ECF based on heat removed for Water Cooled by Refrigeration may be useful tool for comparison task, including it in this Table 3 without any explanation or reference is just confusing. Proposed Solution: Remove the only ECF based on heat removed from Table 3 for consistency as this ECF is discussed in RI-2.2.3.2.	
	TF input (optional)		
at	Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter. GO TO “Related” subsection
		<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY. GO TO “Final” subsection → (A)
	Motion and Reason	<input checked="" type="checkbox"/>	‘Related’ is mutually agreed upon. (Needs no motion.) GO TO “Persuasive” subsection

	(check one)	Negative is not related. (Needs $\geq 2/3$ votes to pass.)			
		Reason	XXXX		
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)			
	Discussion				
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.			
		[Negative is not related.] < 2/3	GO TO "Persuasive" subsection		
		2/3 $\leq$ [Negative is not related.]	GO TO "Final" subsection $\rightarrow$ (B)		
Persuasive	Motion and Reason (check one)	Negative is related and persuasive. (Needs >1/3 votes to pass.)			
		x	Negative is related and not persuasive. (Needs $\geq 2/3$ votes to pass.)		
			Reason	"Table 3 is for ECF all based on flow." is not true. Table 3 is NOT based on flow at all. No reason is provided why this particular ECF is confusing other than this ECF is not based on flow.	
	Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)			
	Discussion				
	Result of Vote (check one)	8 Y-0 N; Motion passed/failed.			
			[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	Y
		[Negative is related and not persuasive.] < 2/3		N	GO TO "Final" subsection $\rightarrow$ (E)
		2/3 $\leq$ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection $\rightarrow$ (C)		
x		90% $\leq$ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection		
Address by Technical Change Option	<b>Technical Change Recommendations</b>				
	Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.				
	1	FROM: Section/Paragraph XXX			
		TO: Section/Paragraph xxx			
	Justification (if necessary)				
2	FROM: Section/Paragraph XXX				
	TO: Section/Paragraph xxx				



		<b>Justification (if necessary)</b>	
	<b>Motion</b>	Negative is addressed by the technical change(s).	
	<b>Motion by/2<sup>nd</sup> by</b>	Name (Company)/Name (Company)	
	<b>Discussion</b>		
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.	
		<input type="checkbox"/> 2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection
		<input type="checkbox"/> [Negative is not addressed by the technical change(s).] < 2/3	GO TO “Final” subsection → (E)
<b>Incorporation of the Technical Change</b>	<b>Motion</b>	To incorporate the technical change(s).	
	<b>Motion by/2<sup>nd</sup> by</b>	Name (Company)/Name (Company)	
	<b>Discussion</b>		
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.	
		<input type="checkbox"/> 90% ≤ [Agree to incorporate.]	GO TO “Final” subsection → (F)
<input type="checkbox"/> [Disagree to incorporate.] > 10%	GO TO “Final” subsection → (E)		
<b>Not Significant Finding Option</b>	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)		
	<b>Use of “Not significant finding option” (check one)</b>	<input checked="" type="checkbox"/> It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)
		<input type="checkbox"/> It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)
		<input type="checkbox"/> Whether or not the Negative is “not significant” is decided by a vote.	
	<b>Motion</b>	The Negative is “not significant”.	
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)	
	<b>Vote</b>	<input type="checkbox"/> XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)
<input type="checkbox"/> XX Y-XX N; Motion failed with simple majority		GO TO “Final” subsection → (C)	
<b>Final</b>	<b>(check if applicable)</b>	<input type="checkbox"/> (A) Withdrawn (counted under h in disposition)	
		<input type="checkbox"/> (B) Not related (counted under i in disposition)	
		<input type="checkbox"/> (C) Related and not persuasive (significant)	
		<input checked="" type="checkbox"/> (D) Not significant (counted under j in disposition)	
		<input type="checkbox"/> (E) Related and persuasive and not addressed by technical change	DOCUMENT FAILS
		<input type="checkbox"/> (F) Addressed by technical change (counted under k disposition)	
	<b>(check if applicable)</b>	Comment generated. See Section V-(ii) Comment # X.	
<b>Negative 20</b>			
<b>9 at</b>	<b>Referenced</b>	*TF/TC Chapter to fill in, including text in the ballot if necessary.	

	<b>Section/ Paragraph</b>	Table 3, Recommended Energy Conversion Factors, Exhaust Supplemental Information				
	<b>Negative Text</b>	<p>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</p> <p>The exhaust ECF is intended to capture the energy associated with an exhaust fan regardless of the location of the fan. Only those exhaust fans integral to the SME and whose energy is measured along with the SME energy would the ECF be 0.0. Proposed The ECF for exhaust which exits directly into the clean room is 0.0 if the motive force to produce the exhaust is part of the SME electrical energy consumption otherwise exhaust whose motive force is outside the SME should use the recommended ECF value.</p>				
	<b>TF input (optional)</b>					
	<b>Withdrawal (check one)</b>	X	No Negative withdrawal made by Voter.		GO TO "Related" subsection	
			Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO "Final" subsection → (A)	
<b>Related</b>	<b>Motion and Reason (check one)</b>	X	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection	
			Negative is not related. (Needs ≥2/3 votes to pass.)			
			Reason	XXXX		
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)				
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.				
		[Negative is not related.] < 2/3			GO TO "Persuasive" subsection	
		2/3 ≤ [Negative is not related.]			GO TO "Final" subsection → (B)	
<b>Persuasive</b>	<b>Motion and Reason (check one)</b>		Negative is related and persuasive. (Needs >1/3 votes to pass.)			
		x	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			
			Reason	Only way to exhaust directly to cleanroom from SME is to have motive force in SME. The energy for this is accounted as equipment electricity use.		
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)				
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	8 Y-0 N; Motion passed				
		[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	Y	GO TO "Address by Technical Change Option" subsection	
		[Negative is related and not persuasive.] < 2/3		N	GO TO "Final" subsection → (E)	
		2/3 ≤ [Negative is related and not persuasive.] < 90%		GO TO "Final" subsection → (C)		

		x	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection	
Address by Technical Change Option	<b>Technical Change Recommendations</b>				
	Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.				
	1	Technical Changes	FROM: Section/Paragraph XXX		
			TO: Section/Paragraph xxx		
			Justification (if necessary)		
	2	Technical Changes	FROM: Section/Paragraph XXX		
			TO: Section/Paragraph xxx		
			Justification (if necessary)		
	Motion		Negative is addressed by the technical change(s).		
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
Discussion					
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.			
		2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection		
		[Negative is not addressed by the technical change(s).] < 2/3	GO TO “Final” subsection → (E)		
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).		
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
	Discussion				
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
		90% ≤ [Agree to incorporate.]	GO TO “Final” subsection → (F)		
		[Disagree to incorporate.] > 10%	GO TO “Final” subsection → (E)		
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)				
	Use of “Not significant finding option” (check one)	x	It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)	
			It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)	
			Whether or not the Negative is “not significant” is decided by a vote.		
	Motion		The Negative is “not significant”.		
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)			

	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)
		<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)
Final	(check if applicable)	<input type="checkbox"/>	(A) Withdrawn (counted under h in disposition)	
		<input type="checkbox"/>	(B) Not related (counted under i in disposition)	
		<input type="checkbox"/>	(C) Related and not persuasive (significant)	
		<input checked="" type="checkbox"/>	(D) Not significant (counted under j in disposition)	
		<input type="checkbox"/>	(E) Related and persuasive and not addressed by technical change	DOCUMENT FAILS
	<input type="checkbox"/>	(F) Addressed by technical change (counted under k disposition)		
	(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.	

### Negative 21

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. Table 3, Recommended Energy Conversion Factors, Water Cooled by Refrigeration		
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. Water Cooled by Refrigeration introduces the term "equivalent energy per volume". Proposal: Many other ECFs are energy per volume, add energy per volume for all other ECF to be consistent		
TF input (optional)				
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO "Related" subsection
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO "Final" subsection → (A)
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.) GO TO "Persuasive" subsection	
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)	
		Reason	XXXX	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)		
	Discussion			
Result of Vote (check one)	XX Y-XX N; Motion passed/failed.			
	<input type="checkbox"/>	[Negative is not related.] < 2/3		GO TO "Persuasive" subsection
	<input type="checkbox"/>	2/3 ≤ [Negative is not related.]		GO TO "Final" subsection → (B)
Persuasive	Motion and Reason (check one)	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)	
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)	

		<b>Reason</b>	As seen in the title of the Section 9, ECF refers to equivalent energy or power for amount of utility used or utility use rate. Regardless of existence of modifier “equivalent” Table3 can be understood to provide energy or power equivalent of given utility.		
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)			
	<b>Discussion</b>	Editorial change for better consistency within the Table may be beneficial: To delete “equivalent” from the “Energy Conversion Factor” column in “Water Cooled by Refrigeration” row.			
	<b>Result of Vote (check one)</b>	8 Y-0 N; Motion passed			
		[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	Y	GO TO “Address by Technical Change Option” subsection
		[Negative is related and not persuasive.] < 2/3		N	GO TO “Final” subsection → (E)
		2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)		
		x 90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection		
<b>Address by Technical Change Option</b>	<b>Technical Change Recommendations</b>				
	Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.				
	1	FROM: Section/Paragraph XXX			
		TO: Section/Paragraph xxx			
		Justification (if necessary)			
	2	FROM: Section/Paragraph XXX			
		TO: Section/Paragraph xxx			
		Justification (if necessary)			
		<b>Motion</b>	Negative is addressed by the technical change(s).		
		<b>Motion by/2<sup>nd</sup> by</b>	Name (Company)/Name (Company)		
	<b>Discussion</b>				
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.			
		2/3 ≤ [Negative is addressed by the technical change(s).]		GO TO “Incorporation of the Technical Change” subsection	
		[Negative is not addressed by the technical change(s).] < 2/3		GO TO “Final” subsection → (E)	
<b>Incorporation</b>	<b>Motion</b>	To incorporate the technical change(s).			
	<b>Motion by/2<sup>nd</sup> by</b>	Name (Company)/Name (Company)			

		Discussion		
		Result of Vote (check one)	XX Y-XX N; Motion passed/failed.	
			90% ≤ [Agree to incorporate.]	
			[Disagree to incorporate.] > 10%	
			GO TO "Final" subsection → (F)	
			GO TO "Final" subsection → (E)	
Not Significant Finding Option	This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.4.4.2)			
	Use of "Not significant finding option" (check one)	x	It is mutually agreed upon to term the Negative "not significant".	
			It is mutually agreed upon to term the Negative "significant".	
			Whether or not the Negative is "not significant" is decided by a vote.	
	Motion	The Negative is "not significant".		
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)		
	Vote		XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)
		XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)	
Final	(check if applicable)		(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 and not addressed by technical change	DOCUMENT FAILS
			(F) Addressed by technical change (counted under k disposition)	
	(check if applicable)	X	Comment generated. See Section V-(ii) Comment # NC-3	

### Negative 22

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.	
		Table 3, Water Cooled by Refrigeration	
Negative	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.	
		For addition new "Equivalent Energy/Heat Energy Removed" (1) The units of this term are missing, if the units are kJ/m <sup>3</sup> then how does this reconcile with ECF in the same section. (2) There is no foundation for introduction of this term. All previous ECF were based upon SEAJ reference documents. SEAJ documents did not use this term. Additional work is needed before introducing this term. Proposal: Delete new term.	
	TF input (optional)		
Withdrawal (check one)	X	No Negative withdrawal made by Voter.	GO TO "Related" subsection
		Withdrawal document received by Standards staff on MM/DD/YYYY.	GO TO "Final" subsection → (A)
at	Motion and Reason	X	'Related' is mutually agreed upon. (Needs no motion.) GO TO "Persuasive" subsection

	(check one)	Negative is not related. (Needs $\geq 2/3$ votes to pass.)			
		Reason	XXXX		
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)			
	Discussion				
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.			
			[Negative is not related.] < 2/3	GO TO "Persuasive" subsection	
			$2/3 \leq$ [Negative is not related.]	GO TO "Final" subsection $\rightarrow$ (B)	
Persuasive	Motion and Reason (check one)		Negative is related and persuasive. (Needs >1/3 votes to pass.)		
		x	Negative is related and not persuasive. (Needs $\geq 2/3$ votes to pass.)		
		Reason	(1) Equivalent Energy/Heat Energy Removed = Equivalent Power/Heat Power Removed is unit-less because when converting energy to energy; conversion factor should not have unit.  (2) SEAJ Document is not referenced by this Table.3.		
	Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)			
	Discussion				
	Result of Vote (check one)	8 Y-0 N; Motion passed			
		[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	Y	GO TO "Address by Technical Change Option" subsection
		[Negative is related and not persuasive.] < 2/3		N	GO TO "Final" subsection $\rightarrow$ (E)
		$2/3 \leq$ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection $\rightarrow$ (C)		
X		$90\% \leq$ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection		
Address by Technical Change Option	<b>Technical Change Recommendations</b>				
	Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.				
	1	FROM: Section/Paragraph XXX			
		TO: Section/Paragraph xxx			
2	Justification (if necessary)				
	FROM: Section/Paragraph XXX				

		TO: Section/Paragraph xxx	
		Justification (if necessary)	
	Motion	Negative is addressed by the technical change(s).	
	Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Discussion		
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.	
		<input type="checkbox"/> 2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection
		<input type="checkbox"/> [Negative is not addressed by the technical change(s).] < 2/3	GO TO “Final” subsection → (E)
Incorporation of the Technical Change	Motion	To incorporate the technical change(s).	
	Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Discussion		
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.	
<input type="checkbox"/> 90% ≤ [Agree to incorporate.]		GO TO “Final” subsection → (F)	
<input type="checkbox"/> [Disagree to incorporate.] > 10%		GO TO “Final” subsection → (E)	
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)		
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/> It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)
		<input type="checkbox"/> It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)
		<input type="checkbox"/> Whether or not the Negative is “not significant” is decided by a vote.	
	Motion	The Negative is “not significant”.	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Vote	<input type="checkbox"/> XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)
<input type="checkbox"/> XX Y-XX N; Motion failed with simple majority		GO TO “Final” subsection → (C)	
Final	<input type="checkbox"/> (A)	Withdrawn (counted under h in disposition)	
	<input type="checkbox"/> (B)	Not related (counted under i in disposition)	
	<input type="checkbox"/> (C)	Related and not persuasive (significant)	
	<input checked="" type="checkbox"/> (D)	Not significant (counted under j in disposition)	
	<input type="checkbox"/> (E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
	<input type="checkbox"/> (F)	Addressed by technical change (counted under k disposition)	
(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.	



### Negative 23

<b>Negative</b>	Referenced Section/ Paragraph	<b>*TF/TC Chapter to fill in, including text in the ballot if necessary.</b>				
		Table 3, N2				
	Negative Text	<b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b> Need to be consistent with the other ECF Proposed Units for N2 should be changed to 900 kJ/m3 to match number format for other utilities				
TF input (optional)						
<b>Withdrawal (check one)</b>	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO "Related" subsection		
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO "Final" subsection → (A)		
<b>Related</b>	<b>Motion and Reason (check one)</b>	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection	
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)			
			Reason	XXXX		
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)				
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.				
<input type="checkbox"/>		[Negative is not related.] < 2/3			GO TO "Persuasive" subsection	
<input type="checkbox"/>		2/3 ≤ [Negative is not related.]			GO TO "Final" subsection → (B)	
<b>Persuasive</b>	<b>Motion and Reason (check one)</b>	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)			
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			
			Reason	The format of the value does not change the value.		
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)				
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	8 Y-0 N; Motion passed/.				
<input type="checkbox"/>		[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input type="checkbox"/>	Y	GO TO "Address by Technical Change Option" subsection
<input type="checkbox"/>		[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N	GO TO "Final" subsection → (E)
<input type="checkbox"/>		2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)			
<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection				

		<b>Technical Change Recommendations</b>		
		Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.		
Address by Technical Change Option	Technical Changes	1	FROM: Section/Paragraph XXX	
			TO: Section/Paragraph xxx	
			Justification (if necessary)	
		2	FROM: Section/Paragraph XXX	
			TO: Section/Paragraph xxx	
			Justification (if necessary)	
Motion		Negative is addressed by the technical change(s).		
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
Discussion				
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).] GO TO “Incorporation of the Technical Change” subsection	
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3 GO TO “Final” subsection → (E)	
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).	
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)	
	Discussion			
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.	
<input type="checkbox"/>			90% ≤ [Agree to incorporate.] GO TO “Final” subsection → (F)	
<input type="checkbox"/>			[Disagree to incorporate.] > 10% GO TO “Final” subsection → (E)	
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)			
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”. GO TO “Final” subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”. GO TO “Final” subsection → (C)	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.	
	Motion		The Negative is “not significant”.	
	Motion by/ 2 <sup>nd</sup> by		Name (Company)/Name (Company)	
Vote		<input type="checkbox"/> XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)	

			XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)
Final	(check if applicable)		(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 and not addressed by technical change	DOCUMENT FAILS
		(F) Addressed by technical change (counted under k disposition)		
(check if applicable)	X	Comment generated. See Section VI-#7		

### Negative 24

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. Table 2			
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. Consistency Item "Heat Load", change to match Table 3 "Air Conditioning (heat load, cooling load)"			
TF input (optional)					
Withdrawal (check one)	X	No Negative withdrawal made by Voter.		GO TO "Related" subsection	
		Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO "Final" subsection → (A)	
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection
			Negative is not related. (Needs ≥2/3 votes to pass.)		
		Reason	XXXX		
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)			
	Discussion				
Result of Vote (check one)	XX Y-XX N; Motion passed/failed.				
		[Negative is not related.] < 2/3		GO TO "Persuasive" subsection	
		2/3 ≤ [Negative is not related.]		GO TO "Final" subsection → (B)	
Persuasive	Motion and Reason (check one)	x	Negative is related and persuasive. (Needs >1/3 votes to pass.)		
			Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)		
		Reason	The terminology doesn't match between Table 2 and Table3		
	Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)			
	Discussion	The relation between those terms is not explicitly explained.			
Result of Vote	8 Y-0 N; Motion passed				

	(check one)	<input checked="" type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	GO TO "Address by Technical Change Option" subsection	
		<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	<input type="checkbox"/>	N	GO TO "Final" subsection → (E)
		<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)				
		<input type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection				
Address by Technical Change Option	<b>Technical Change Recommendations</b>							
	Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.							
	Technical Changes	1	FROM: Section/Paragraph Table 2, in the "Data Title" column "Heat Load"					
			TO: Section/Paragraph Table 2, in the "Data Title" column "Heat Load / Cooling Load to air conditioner"					
			Justification (if necessary) Consistency between Table 2 and Table 3					
		2	FROM: Section/Paragraph Table 2 in the "description" column "Heat load"					
			TO: Section/Paragraph Table 2 in the "description" column "Heat load / cooling load to air conditioner"					
			Justification (if necessary) Consistency between Table 2 and Table 3					
	Motion		Negative is addressed by the technical change(s).					
	Motion by/2 <sup>nd</sup> by		George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)					
Discussion								
Result of Vote (check one)		8 Y-0 N; Motion passed/						
<input checked="" type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection						
<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)						
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).					
	Motion by/2 <sup>nd</sup> by		George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)					
	Discussion							
	Result of Vote (check one)		8 Y-0 N; Motion passed					
	<input checked="" type="checkbox"/>	90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)					
<input type="checkbox"/>	[Disagree to incorporate.] > 10%	GO TO "Final" subsection → (E)						
Significant Finding	This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.4.4.2)							
	Use of "Not significant"	<input type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant".			GO TO "Final" subsection → (D)		

	<b>finding option” (check one)</b>	<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”.	<b>GO TO “Final” subsection → (C)</b>	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.		
	<b>Motion</b>	The Negative is “not significant”.			
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)			
	<b>Vote</b>	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	<b>GO TO “Final” subsection → (D)</b>	
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	<b>GO TO “Final” subsection → (C)</b>		
<b>Final</b>	<b>(check if applicable)</b>	<input type="checkbox"/>	<b>(A)</b>	Withdrawn <b>(counted under h in disposition)</b>	
		<input type="checkbox"/>	<b>(B)</b>	Not related <b>(counted under i in disposition)</b>	
		<input type="checkbox"/>	<b>(C)</b>	Related and not persuasive (significant)	
		<input type="checkbox"/>	<b>(D)</b>	Not significant <b>(counted under j in disposition)</b>	
		<input type="checkbox"/>	<b>(E)</b>	Related and persuasive and not addressed by technical change	<b>DOCUMENT FAILS</b>
		<input checked="" type="checkbox"/>	<b>(F)</b>	Addressed by technical change <b>(counted under k disposition)</b>	
	<b>(check if applicable)</b>	<input type="checkbox"/>	Comment generated. <b>See Section V-(ii) Comment # X.</b>		

### Negative 25

<b>Negative</b>	<b>Referenced Section/ Paragraph</b>	<b>*TF/TC Chapter to fill in, including text in the ballot if necessary.</b>		
		10		
	<b>Negative Text</b>	<b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b> See AMAT4 regarding rest mode as this is just another sleep mode at a different level. Proposed Solution: Remove Section 10		
<b>TF input (optional)</b>				
<b>Withdrawal (check one)</b>	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.	<b>GO TO “Related” subsection</b>	
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.	<b>GO TO “Final” subsection → (A)</b>	
<b>Related</b>	<b>Motion and Reason (check one)</b>	<input checked="" type="checkbox"/>	‘Related’ is mutually agreed upon. <b>(Needs no motion.)</b>	
		<input type="checkbox"/>	Negative is not related. <b>(Needs ≥2/3 votes to pass.)</b>	
		Reason	XXXX	
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)		
	<b>Discussion</b>			
<b>Result of Vote (check one)</b>	<input type="checkbox"/>	XX Y-XX N; Motion passed/failed.		
	<input type="checkbox"/>	[Negative is not related.] < 2/3	<b>GO TO “Persuasive” subsection</b>	
	<input type="checkbox"/>	2/3 ≤ [Negative is not related.]	<b>GO TO “Final” subsection → (B)</b>	

<b>Persuasive</b>	<b>Motion and Reason (check one)</b>	<input type="checkbox"/>	Negative is related and persuasive. <b>(Needs &gt;1/3 votes to pass.)</b>		
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. <b>(Needs ≥2/3 votes to pass.)</b>		
		<b>Reason</b>	This is identical to the issue raised in a previously-dealt-with Negative <i>(Procedural Manual 2.11.3.1.6 Previously Considered Negative )</i> See response to AMAT-4 and AMAT-5		
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)			
	<b>Discussion</b>				
<b>Result of Vote (check one)</b>	7 Y-0 N; Motion passed				
	<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	<input type="checkbox"/>	Y GO TO "Address by Technical Change Option" subsection
	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N GO TO "Final" subsection → (E)
	<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)		
	<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection		
<b>Address by Technical Change Option</b>	<b>Technical Change Recommendations</b>				
	Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.				
	1	FROM: Section/Paragraph XXX			
		TO: Section/Paragraph xxx			
		Justification (if necessary)			
	2	FROM: Section/Paragraph XXX			
		TO: Section/Paragraph xxx			
		Justification (if necessary)			
	<b>Motion</b>		Negative is addressed by the technical change(s).		
	<b>Motion by/2<sup>nd</sup> by</b>		Name (Company)/Name (Company)		
<b>Discussion</b>					
<b>Result of Vote (check one)</b>		XX Y-XX N; Motion passed/failed.			
<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection			

		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)	
	Incorporation of the Technical Change	Motion	To incorporate the technical change(s).		
		Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)		
		Discussion			
		Result of Vote (check one)	XX Y-XX N; Motion passed/failed.		
<input type="checkbox"/>	90% ≤ [Agree to incorporate.]		GO TO "Final" subsection → (F)		
<input type="checkbox"/>	[Disagree to incorporate.] > 10%		GO TO "Final" subsection → (E)		
Not Significant Finding Option	This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.4.4.2)				
	Use of "Not significant finding option" (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant".	GO TO "Final" subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative "significant".	GO TO "Final" subsection → (C)	
		<input type="checkbox"/>	Whether or not the Negative is "not significant" is decided by a vote.		
	Motion	The Negative is "not significant".			
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)			
	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)	
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)		
Final	(check if applicable)	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)	
		<input type="checkbox"/>	(B)	Not related (counted under i in disposition)	
		<input type="checkbox"/>	(C)	Related and not persuasive (significant)	
		<input checked="" type="checkbox"/>	(D)	Not significant (counted under j in disposition)	
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
		<input type="checkbox"/>	(F)	Addressed by technical change (counted under k disposition)	
	(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.		

### Negative 26

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.		
		11.1		
Negative	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.		
		The SME could go into sleep mode, not only due to action by personnel of facility control system but could also from action initiate by the SME own control system. Proposed Solution: delete the word " facility " from the sentence		
TF input (optional)				
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.	GO TO "Related" subsection	

		Withdrawal document received by Standards staff on MM/DD/YYYY.	GO TO “Final” subsection → (A)	
Related	Motion and Reason (check one)	X	‘Related’ is mutually agreed upon. (Needs no motion.) GO TO “Persuasive” subsection	
			Negative is not related. (Needs ≥2/3 votes to pass.)	
		Reason	XXXX	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)		
	Discussion			
Result of Vote (check one)	XX Y-XX N; Motion passed/failed.			
		[Negative is not related.] < 2/3	GO TO “Persuasive” subsection	
		2/3 ≤ [Negative is not related.]	GO TO “Final” subsection → (B)	
Persuasive	Motion and Reason (check one)		Negative is related and persuasive. (Needs >1/3 votes to pass.)	
		x	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)	
		Reason	By definition sleep mode is initiated by an external command. If a lower energy use state is initiated by “the SME own control system” this would be a rest mode as defined by this document.	
	Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)		
	Discussion			
Result of Vote (check one)	7 Y-0 N; Motion passed			
		[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	Y GO TO “Address by Technical Change Option” subsection
		[Negative is related and not persuasive.] < 2/3		N GO TO “Final” subsection → (E)
		2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)	
	x	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection	
Address by Technical Change Option	Technical Change Recommendations			
	Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.			
	1	FROM: Section/Paragraph XXX		
	TO: Section/Paragraph xxx			
	Justification (if necessary)			



	2	FROM: Section/Paragraph <b>XXX</b>		
		TO: Section/Paragraph <b>xxx</b>		
		Justification (if necessary)		
<b>Motion</b>		Negative is addressed by the technical change(s).		
<b>Motion by/2<sup>nd</sup> by</b>		Name (Company)/Name (Company)		
<b>Discussion</b>				
<b>Result of Vote (check one)</b>		XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).] GO TO "Incorporation of the Technical Change" subsection	
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3 GO TO "Final" subsection → (E)	
<b>Incorporation of the Technical Change</b>	<b>Motion</b>		To incorporate the technical change(s).	
	<b>Motion by/2<sup>nd</sup> by</b>		Name (Company)/Name (Company)	
	<b>Discussion</b>			
	<b>Result of Vote (check one)</b>		XX Y-XX N; Motion passed/failed.	
<input type="checkbox"/>			90% ≤ [Agree to incorporate.] GO TO "Final" subsection → (F)	
<input type="checkbox"/>			[Disagree to incorporate.] > 10% GO TO "Final" subsection → (E)	
<b>Not Significant Finding Option</b>	This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.4.4.2)			
	<b>Use of "Not significant finding option" (check one)</b>	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant". GO TO "Final" subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative "significant". GO TO "Final" subsection → (C)	
		<input type="checkbox"/>	Whether or not the Negative is "not significant" is decided by a vote.	
	<b>Motion</b>		The Negative is "not significant".	
	<b>Motion by/ 2<sup>nd</sup> by</b>		Name (Company)/Name (Company)	
	<b>Vote</b>		<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority GO TO "Final" subsection → (D)
<input type="checkbox"/>			XX Y-XX N; Motion failed with simple majority GO TO "Final" subsection → (C)	
<b>Final</b>	<b>(check if applicable)</b>	<input type="checkbox"/>	(A) Withdrawn (counted under h in disposition)	
		<input type="checkbox"/>	(B) Not related (counted under i in disposition)	
		<input type="checkbox"/>	(C) Related and not persuasive (significant)	
		<input checked="" type="checkbox"/>	(D) Not significant (counted under j in disposition)	
		<input type="checkbox"/>	(E) Related and persuasive and not addressed by technical change DOCUMENT FAILS	
		<input type="checkbox"/>	(F) Addressed by technical change (counted under k disposition)	

	<b>(check if applicable)</b>		Comment generated. <b>See Section V-(ii) Comment # X.</b>
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### Negative 27

<b>Negative</b>	<b>Referenced Section/ Paragraph</b>	<b>*TF/TC Chapter to fill in, including text in the ballot if necessary.</b>		
		11.5.3		
<b>Negative</b>	<b>Negative Text</b>	<b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b>		
		Indicates if there are foreseen variations greater than 10% and 5 seconds to be included in documentation without any rationale to these criteria. Let the suppliers to determine if the variations are such that the user needs to be aware off. Proposed Solution: Remove the following from the sentence: "greater than 10% that are also greater than 5 seconds"		
<b>TF input (optional)</b>				
<b>Withdrawal (check one)</b>	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.	<b>GO TO "Related" subsection</b>	
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.	<b>GO TO "Final" subsection → (A)</b>	
<b>Related</b>	<b>Motion and Reason (check one)</b>	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. <b>(Needs no motion.)</b>	<b>GO TO "Persuasive" subsection</b>
		<input type="checkbox"/>	Negative is not related. <b>(Needs ≥2/3 votes to pass.)</b>	
		Reason	XXXX	
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)		
	<b>Discussion</b>			
	<b>Result of Vote (check one)</b>	<input type="checkbox"/>	[Negative is not related.] < 2/3	<b>GO TO "Persuasive" subsection</b>
<input type="checkbox"/>		2/3 ≤ [Negative is not related.]	<b>GO TO "Final" subsection → (B)</b>	
<b>Persuasive</b>	<input type="checkbox"/>	Negative is related and persuasive. <b>(Needs &gt;1/3 votes to pass.)</b>		
	<input checked="" type="checkbox"/>	Negative is related and not persuasive. <b>(Needs ≥2/3 votes to pass.)</b>		
	<b>Motion and Reason (check one)</b>	Reason	<p>The rational to have definite number is to standardize the process of calculating annual equivalent energy use estimate.</p> <p>It is true rational for 10% and 5 seconds is not provided in the document, but rationale for most SEMI Safety Guidelines is not provided, and is generally not found as a persuasive reason not to publish the criteria (i.e. understanding the rationale for a criteria does not significantly impact one's ability to conform to the criteria).</p>	
<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)			

	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	7 Y-0 N; Motion passed/				
		<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	<input type="checkbox"/> Y	GO TO "Address by Technical Change Option" subsection
		<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/> N	GO TO "Final" subsection → (E)
		<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)		
		<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection		
<b>Address by Technical Change Option</b>	<b>Technical Change Recommendations</b>					
	Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.					
	<b>Technical Changes</b>	1	FROM: Section/Paragraph XXX			
			TO: Section/Paragraph xxx			
			Justification (if necessary)			
		2	FROM: Section/Paragraph XXX			
			TO: Section/Paragraph xxx			
			Justification (if necessary)			
	<b>Motion</b>		Negative is addressed by the technical change(s).			
	<b>Motion by/2<sup>nd</sup> by</b>		Name (Company)/Name (Company)			
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>		XX Y-XX N; Motion passed/failed.			
			<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection	
<input type="checkbox"/>			[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)		
<b>Incorporation of the Technical Change</b>	<b>Motion</b>		To incorporate the technical change(s).			
	<b>Motion by/2<sup>nd</sup> by</b>		Name (Company)/Name (Company)			
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>		XX Y-XX N; Motion passed/failed.			
			<input type="checkbox"/>	90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)	
	<input type="checkbox"/>	[Disagree to incorporate.] > 10%	GO TO "Final" subsection → (E)			

Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)		
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”. GO TO “Final” subsection → (D)
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”. GO TO “Final” subsection → (C)
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.
	Motion	The Negative is “not significant”.	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority GO TO “Final” subsection → (D)
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority GO TO “Final” subsection → (C)	
Final	(check if applicable)	<input type="checkbox"/>	(A) Withdrawn (counted under h in disposition)
		<input type="checkbox"/>	(B) Not related (counted under i in disposition)
		<input type="checkbox"/>	(C) Related and not persuasive (significant)
		<input checked="" type="checkbox"/>	(D) Not significant (counted under j in disposition)
		<input type="checkbox"/>	(E) Related and persuasive and not addressed by technical change DOCUMENT FAILS
		<input type="checkbox"/>	(F) Addressed by technical change (counted under k disposition)
	(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.

### Negative 28

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 11.5.6	
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. ECF is for equivalent energy not power Proposed Solution: Replace “power” with “energy”	
TF input (optional)			
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter. GO TO “Related” subsection	
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY. GO TO “Final” subsection → (A)	
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	‘Related’ is mutually agreed upon. (Needs no motion.) GO TO “Persuasive” subsection
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)
	Reason	XXXX	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Discussion		
Result of Vote	XX Y-XX N; Motion passed/failed.		

	(check one)	<input type="checkbox"/>	[Negative is not related.] < 2/3	GO TO "Persuasive" subsection	
		<input type="checkbox"/>	2/3 ≤ [Negative is not related.]	GO TO "Final" subsection → (B)	
Persuasive	Motion and Reason (check one)	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)		
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)		
		Reason	The conversion between energy and power requires only a basic understanding of physics. All qualitative statements about power are true for energy once a relevant time period is defined. A basic goal of the document is energy efficiency analysis.. Power is the use rate of energy.		
	Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)			
	Discussion				
	Result of Vote (check one)	7 Y-0 N; Motion passed/			
<input type="checkbox"/>		[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input type="checkbox"/>	Y GO TO "Address by Technical Change Option" subsection
<input type="checkbox"/>		[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N GO TO "Final" subsection → (E)
<input type="checkbox"/>		2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)		
<input checked="" type="checkbox"/>		90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection		
Address by Technical Change Option	<b>Technical Change Recommendations</b>				
	Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.				
	1	FROM: Section/Paragraph XXX			
		TO: Section/Paragraph xxx			
		Justification (if necessary)			
	2	FROM: Section/Paragraph XXX			
		TO: Section/Paragraph xxx			
		Justification (if necessary)			
Motion		Negative is addressed by the technical change(s).			
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)			
Discussion					
Result of Vote		XX Y-XX N; Motion passed/failed.			

	<b>(check one)</b>		<input type="checkbox"/> 2/3 ≤ [Negative is addressed by the technical change(s).]	<b>GO TO “Incorporation of the Technical Change” subsection</b>	
			<input type="checkbox"/> [Negative is not addressed by the technical change(s).] < 2/3	<b>GO TO “Final” subsection → (E)</b>	
	<b>Incorporation of the Technical Change</b>	<b>Motion</b>	To incorporate the technical change(s).		
		<b>Motion by/2<sup>nd</sup> by</b>	Name (Company)/Name (Company)		
		<b>Discussion</b>			
		<b>Result of Vote (check one)</b>	<b>XX Y-XX N; Motion passed/failed.</b>		
<input type="checkbox"/>	90% ≤ [Agree to incorporate.]		<b>GO TO “Final” subsection → (F)</b>		
<input type="checkbox"/>	[Disagree to incorporate.] > 10%		<b>GO TO “Final” subsection → (E)</b>		
<b>Not Significant Finding Option</b>	<b>This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)</b>				
	<b>Use of “Not significant finding option” (check one)</b>	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”.	<b>GO TO “Final” subsection → (D)</b>	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”.	<b>GO TO “Final” subsection → (C)</b>	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.		
	<b>Motion</b>	The Negative is “not significant”.			
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)			
	<b>Vote</b>	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	<b>GO TO “Final” subsection → (D)</b>	
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	<b>GO TO “Final” subsection → (C)</b>		
<b>Final</b>	<b>(check if applicable)</b>	<input type="checkbox"/>	<b>(A)</b>	Withdrawn <b>(counted under h in disposition)</b>	
		<input type="checkbox"/>	<b>(B)</b>	Not related <b>(counted under i in disposition)</b>	
		<input type="checkbox"/>	<b>(C)</b>	Related and not persuasive (significant)	
		<input checked="" type="checkbox"/>	<b>(D)</b>	Not significant <b>(counted under j in disposition)</b>	
		<input type="checkbox"/>	<b>(E)</b>	Related and persuasive and not addressed by technical change	<b>DOCUMENT FAILS</b>
		<input type="checkbox"/>	<b>(F)</b>	Addressed by technical change <b>(counted under k disposition)</b>	
	<b>(check if applicable)</b>	<input type="checkbox"/>	Comment generated. <b>See Section V-(ii) Comment # X.</b>		
<b>Negative 29</b>					
<b>Negative</b>	<b>Referenced Section/ Paragraph</b>	<b>*TF/TC Chapter to fill in, including text in the ballot if necessary.</b>			
		12.9			
	<b>Negative Text</b>	<b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b>			

		Revise for improved readability, underlined are changes Proposal: By deploying custom ECFs SME suppliers can also work with SME users to understand the impact of their utility needs on the operating efficiency of SME user's utilities. Examples of these include decreasing the heat load to the cleanroom air conditioning system by means of increased heat transfer <u>via cooling water</u> , decreased exhaust pressure drops, and decreased cooling water heat exchanger pressure drops. All of these changes, while not necessarily decreasing the utility use rate, may have a significant environmental impact.				
<b>TF input (optional)</b>						
<b>Withdrawal (check one)</b>	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO "Related" subsection		
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO "Final" subsection → (A)		
<b>Related</b>	<b>Motion and Reason (check one)</b>	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection	
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)			
		Reason	XXXX			
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)				
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.				
		<input type="checkbox"/>	[Negative is not related.] < 2/3		GO TO "Persuasive" subsection	
<input type="checkbox"/>		2/3 ≤ [Negative is not related.]		GO TO "Final" subsection → (B)		
<b>Persuasive</b>	<b>Motion and Reason (check one)</b>	<input checked="" type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)			
		<input type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			
		Reason	Means for decreasing the heat load to the cleanroom air conditioning system should be detailed			
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)				
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	8 Y-0 N; Motion passed.				
		<input checked="" type="checkbox"/>	[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>		[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	<input type="checkbox"/>	GO TO "Final" subsection → (E)
<input type="checkbox"/>		2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)			
<input type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection				

<b>Technical Change Recommendations</b>			
Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.			
<b>Address by Technical Change Option</b>	<b>1</b>	FROM: Section/Paragraph <b>12.9</b> Examples of these include decreasing the Room Heat Burden heat load to the cleanroom air condition system by means of increased cooling water heat transfer, decreased exhaust pressure drops, and decreased cooling water heat exchanger pressure drops, etc.	
		TO: Section/Paragraph <b>xxx</b> Examples of these include decreasing the Room Heat Burden heat load to the cleanroom air conditioning system by means of increased cooling water heat transfer <u>via cooling water</u> , decreased exhaust pressure drops, and decreased cooling water heat exchanger pressure drops, etc.	
	Justification (if necessary)		
	<b>2</b>	FROM: Section/Paragraph <b>XXX</b>	
TO: Section/Paragraph <b>xxx</b>			
Justification (if necessary)			
<b>Motion</b>		Negative is addressed by the technical change(s).	
<b>Motion by/2<sup>nd</sup> by</b>		George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)	
<b>Discussion</b>			
<b>Result of Vote (check one)</b>		8 Y-0 N; Motion passed	
		<input checked="" type="checkbox"/> 2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection
		<input type="checkbox"/> [Negative is not addressed by the technical change(s).] < 2/3	GO TO “Final” subsection → (E)
<b>Incorporation of the Technical Change</b>	<b>Motion</b>		To incorporate the technical change(s).
	<b>Motion by/2<sup>nd</sup> by</b>		George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)
	<b>Discussion</b>		
	<b>Result of Vote (check one)</b>		8 Y-0 N; Motion passed
		<input checked="" type="checkbox"/> 90% ≤ [Agree to incorporate.]	GO TO “Final” subsection → (F)
		<input type="checkbox"/> [Disagree to incorporate.] > 10%	GO TO “Final” subsection → (E)
<b>Not Significant Finding Option</b>	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)		
	<b>Use of “Not significant finding option” (check one)</b>	<input type="checkbox"/> It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)
		<input type="checkbox"/> It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)
	<input type="checkbox"/> Whether or not the Negative is “not significant” is decided by a vote.		



	<b>Motion</b>	The Negative is “not significant”.		
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)		
	<b>Vote</b>	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	GO TO “Final” subsection → (C)	
<b>Final</b>	<b>(check if applicable)</b>	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)
		<input type="checkbox"/>	(B)	Not related (counted under i in disposition)
		<input type="checkbox"/>	(C)	Related and not persuasive (significant)
		<input type="checkbox"/>	(D)	Not significant (counted under j in disposition)
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change
	<input checked="" type="checkbox"/>	(F)	Addressed by technical change (counted under k disposition)	
<b>(check if applicable)</b>	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.		

### Negative 30

<b>Negative</b>	<b>Referenced Section/ Paragraph</b>	*TF/TC Chapter to fill in, including text in the ballot if necessary.		
		12.11		
	<b>Negative Text</b>	<p>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</p> <p>Delete bullet “Use less pure processing chemicals”. According to section 9.7 Determining reasonable energy conversion factors for most process chemicals has not yet entered the state of the art. Therefore, conversion factors are not recommended for them. Where is the evidence to support “less pure processing chemicals” results in less energy consumption, for chemical purity the opposite may actually be true since lower quality chemical may increase the processing time.</p> <p>If only the Use Stage of the LCA is being considered in this document then process chemical purity in outside the scope of the document</p>		
	<b>TF input (optional)</b>			
	<b>Withdrawal (check one)</b>	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.	GO TO “Related” subsection
		<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.	GO TO “Final” subsection → (A)
<b>Related</b>	<b>Motion and Reason (check one)</b>	<input checked="" type="checkbox"/>	‘Related’ is mutually agreed upon. (Needs no motion.)	
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)	
		Reason	XXXX	
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)		
	<b>Discussion</b>			
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/>	[Negative is not related.] < 2/3	GO TO “Persuasive” subsection
		<input type="checkbox"/>	2/3 ≤ [Negative is not related.]	GO TO “Final” subsection → (B)

Persuasive		<input type="checkbox"/>	Negative is related and persuasive. <b>(Needs &gt;1/3 votes to pass.)</b>				
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. <b>(Needs ≥2/3 votes to pass.)</b>				
	<b>Motion and Reason (check one)</b>		Reason	<p>The bullet cited by the submitter is not contrary to the statements in section 9.7. ECFs for process chemicals are indeed not proposed.</p> <p>Process chemicals are used during the use stage of the SME.</p> <p>Evidence includes e.g. the following article from Scientific American that suggests new purification methods are needed because the current methods are extremely energy intensive  <a href="http://www.scientificamerican.com/article/7-ways-to-purify-chemicals-that-could-change-the-world/">http://www.scientificamerican.com/article/7-ways-to-purify-chemicals-that-could-change-the-world/</a></p> <p>See also (<a href="http://www.ce.cmu.edu/~hsm/nato-arw/pres/EricWilliams.ppt">http://www.ce.cmu.edu/~hsm/nato-arw/pres/EricWilliams.ppt</a>) which states that higher levels of chemical purity for the semiconductor industry require exponentially more energy to produce.</p> <p>The section says reducing energy consumption “may be feasible” it is not put forward as a certainty. It is an idea suggested for exploration.</p>			
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)					
	<b>Discussion</b>						
<b>Result of Vote (check one)</b>	<b>8 Y-0 N; Motion passed</b>						
	<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	<input type="checkbox"/>	Y	<b>GO TO “Address by Technical Change Option” subsection</b>	
	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N	<b>GO TO “Final” subsection → (E)</b>	
	<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%		<b>GO TO “Final” subsection → (C)</b>			
<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]		<b>GO TO “Not Significant Finding Option” subsection</b>				
Address by Technical Change Option	<b>Technical Change Recommendations</b>						
	<b>Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.</b>						
	<b>Technical Changes</b>	1	FROM: Section/Paragraph <b>XXX</b>				
			TO: Section/Paragraph <b>xxx</b>				
			Justification <b>(if necessary)</b>				

	2	FROM: Section/Paragraph <b>XXX</b>		
		TO: Section/Paragraph <b>xxx</b>		
		Justification (if necessary)		
Motion		Negative is addressed by the technical change(s).		
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
Discussion				
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).] GO TO "Incorporation of the Technical Change" subsection	
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3 GO TO "Final" subsection → (E)	
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).	
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)	
	Discussion			
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.	
<input type="checkbox"/>			90% ≤ [Agree to incorporate.] GO TO "Final" subsection → (F)	
<input type="checkbox"/>	[Disagree to incorporate.] > 10% GO TO "Final" subsection → (E)			
Not Significant Finding Option	This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.4.4.2)			
	Use of "Not significant finding option" (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant". GO TO "Final" subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative "significant". GO TO "Final" subsection → (C)	
		<input type="checkbox"/>	Whether or not the Negative is "not significant" is decided by a vote.	
	Motion		The Negative is "not significant".	
	Motion by/ 2 <sup>nd</sup> by		Name (Company)/Name (Company)	
	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)	
Final	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)	
	<input type="checkbox"/>	(B)	Not related (counted under i in disposition)	
	<input type="checkbox"/>	(C)	Related and not persuasive (significant)	
	<input checked="" type="checkbox"/>	(D)	Not significant (counted under j in disposition)	
	<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
	<input type="checkbox"/>	(F)	Addressed by technical change (counted under k disposition)	

	<b>(check if applicable)</b>	Comment generated. <b>See Section V-(ii) Comment # X.</b>
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**Negative 31**

<b>Negative</b>	<b>Referenced Section/ Paragraph</b>	<b>*TF/TC Chapter to fill in, including text in the ballot if necessary.</b>	
		R1-2.1.3	
	<b>Negative Text</b>	<b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b> With changes in Table 3 updates to references are needed Proposal: The Air Conditioning (heat load, cooling load) calculation follows a model that is different than the other items. It is shown in Table R1-3. R1-2.2.3 ECF for refrigerated cooling water	
<b>TF input (optional)</b>			
<b>Withdrawal (check one)</b>	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.	<b>GO TO "Related" subsection</b>
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.	<b>GO TO "Final" subsection → (A)</b>
<b>Related</b>	<b>Motion and Reason (check one)</b>	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. <b>(Needs no motion.)</b> <span style="float: right;"><b>GO TO "Persuasive" subsection</b></span>
		<input type="checkbox"/>	Negative is not related. <b>(Needs ≥2/3 votes to pass.)</b>
		Reason	XXXX
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)	
	<b>Discussion</b>		
	<b>Result of Vote (check one)</b>	<input type="checkbox"/>	XX Y-XX N; Motion passed/failed.
<input type="checkbox"/>		[Negative is not related.] < 2/3	<b>GO TO "Persuasive" subsection</b>
<input type="checkbox"/>		2/3 ≤ [Negative is not related.]	<b>GO TO "Final" subsection → (B)</b>
<b>Persuasive</b>	<b>Motion and Reason (check one)</b>	<input type="checkbox"/>	Negative is related and persuasive. <b>(Needs &gt;1/3 votes to pass.)</b>
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. <b>(Needs ≥2/3 votes to pass.)</b>
			Reason
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)	
<b>Discussion</b>			

	Result of Vote (check one)	8 Y-0 N; Motion passed		Is a technical change recommended? (check one)		Y	GO TO "Address by Technical Change Option" subsection	
			[Negative is related and persuasive.] > 1/3			N	GO TO "Final" subsection → (E)	
			[Negative is related and not persuasive.] < 2/3			GO TO "Final" subsection → (C)		
		x	2/3 ≤ [Negative is related and not persuasive.] < 90%			GO TO "Not Significant Finding Option" subsection		
<b>Technical Change Recommendations</b> Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.								
Address by Technical Change Option	1	FROM: Section/Paragraph XXX						
		TO: Section/Paragraph xxx						
		Justification (if necessary)						
	2	FROM: Section/Paragraph XXX						
		TO: Section/Paragraph xxx						
		Justification (if necessary)						
	Motion		Negative is addressed by the technical change(s).					
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)					
	Discussion							
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.					
	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection						
	[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)						
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).					
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)					
	Discussion							
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.					
	90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)						
	[Disagree to incorporate.] > 10%	GO TO "Final" subsection → (E)						
Find	This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.4.4.2)							

	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.		
	Motion	The Negative is “not significant”.			
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)			
	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)	
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	GO TO “Final” subsection → (C)		
Final	(check if applicable)	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)	
		<input type="checkbox"/>	(B)	Not related (counted under i in disposition)	
		<input type="checkbox"/>	(C)	Related and not persuasive (significant)	
		<input checked="" type="checkbox"/>	(D)	Not significant (counted under j in disposition)	
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
		<input type="checkbox"/>	(F)	Addressed by technical change (counted under k disposition)	
	(check if applicable)	<input checked="" type="checkbox"/>	Comment generated. See Section V-(ii) Comment # NC-4		

### Negative 32

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.			
		Table R1-1			
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. Incorrect Units N2 Pressure and UPW pressure should be kPA not Pa			
TF input (optional)					
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO “Related” subsection	
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO “Final” subsection → (A)	
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	‘Related’ is mutually agreed upon. (Needs no motion.)		GO TO “Persuasive” subsection
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)		
		Reason	XXXX		
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)			
	Discussion				
Result of Vote (check one)	XX Y-XX N; Motion passed/failed.				
	<input type="checkbox"/>	[Negative is not related.] < 2/3		GO TO “Persuasive” subsection	
	<input type="checkbox"/>	2/3 ≤ [Negative is not related.]		GO TO “Final” subsection → (B)	

Persuasive	<b>Motion and Reason (check one)</b>	<input type="checkbox"/>	Negative is related and persuasive. <b>(Needs &gt;1/3 votes to pass.)</b>			
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. <b>(Needs ≥2/3 votes to pass.)</b>			
		<b>Reason</b>	<p>This Negative would be addressed by correction of conversion errors by editorial changes to replace “1.96 × 10<sup>3</sup> Pa (28.4 psi; 2 kg/cm<sup>2</sup>)” with 0.2 MPa (2kgf/cm<sup>2</sup>) for “Basis of Conversion Factor” column in UPW/DIW row and “793Pa” with “793 kPa” for “Basis of Conversion Factor” column in N2 row of Table R1-1</p> <ul style="list-style-type: none"> <li>● Source of the UPW ECF is SEAJ-E-002E, which was based on JACA’s document titled ‘The energy conversion factors for a semiconductor factory’ specifies UPW supply pressure as 0.2MPa (2kgf/cm<sup>2</sup>)</li> <li>● Source for N2: International Sematech Manufacturing Initiative (ISMI)/Sematech “TEE Tool Correction Factor Calculator.”</li> </ul>			
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)				
	<b>Discussion</b>					
<b>Result of Vote (check one)</b>	8 Y-0 N; Motion passed					
	<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	<input type="checkbox"/>	Y	GO TO “Address by Technical Change Option” subsection
	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N	GO TO “Final” subsection → (E)
	<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)			
	<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection			
Address by Technical Change Option	<b>Technical Change Recommendations</b>					
	Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.					
	<b>1</b>	FROM: Section/Paragraph <b>XXX</b>				
		TO: Section/Paragraph <b>xxx</b>				
		Justification <b>(if necessary)</b>				
<b>2</b>	FROM: Section/Paragraph <b>XXX</b>					
	TO: Section/Paragraph <b>xxx</b>					

		<b>Justification (if necessary)</b>	
	<b>Motion</b>	Negative is addressed by the technical change(s).	
	<b>Motion by/2<sup>nd</sup> by</b>	Name (Company)/Name (Company)	
	<b>Discussion</b>		
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.	
		<input type="checkbox"/> 2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection
		<input type="checkbox"/> [Negative is not addressed by the technical change(s).] < 2/3	GO TO “Final” subsection → (E)
<b>Incorporation of the Technical Change</b>	<b>Motion</b>	To incorporate the technical change(s).	
	<b>Motion by/2<sup>nd</sup> by</b>	Name (Company)/Name (Company)	
	<b>Discussion</b>		
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.	
		<input type="checkbox"/> 90% ≤ [Agree to incorporate.]	GO TO “Final” subsection → (F)
<input type="checkbox"/> [Disagree to incorporate.] > 10%	GO TO “Final” subsection → (E)		
<b>Not Significant Finding Option</b>	<b>This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)</b>		
	<b>Use of “Not significant finding option” (check one)</b>	<input checked="" type="checkbox"/> It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)
		<input type="checkbox"/> It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)
		<input type="checkbox"/> Whether or not the Negative is “not significant” is decided by a vote.	
	<b>Motion</b>	The Negative is “not significant”.	
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)	
	<b>Vote</b>	<input type="checkbox"/> XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)
<input type="checkbox"/> XX Y-XX N; Motion failed with simple majority		GO TO “Final” subsection → (C)	
<b>Final</b>	<b>(check if applicable)</b>	<input type="checkbox"/> (A) Withdrawn (counted under h in disposition)	
		<input type="checkbox"/> (B) Not related (counted under i in disposition)	
		<input type="checkbox"/> (C) Related and not persuasive (significant)	
		<input checked="" type="checkbox"/> (D) Not significant (counted under j in disposition)	
		<input type="checkbox"/> (E) Related and persuasive and not addressed by technical change	DOCUMENT FAILS
		<input type="checkbox"/> (F) Addressed by technical change (counted under k disposition)	
	<b>(check if applicable)</b>	<input checked="" type="checkbox"/> Comment generated. See Section V-(ii) Comment # NC-5	
<b>Negative 33</b>			
<b>9 at</b>	<b>Referenced</b>	*TF/TC Chapter to fill in, including text in the ballot if necessary.	



	<b>Section/ Paragraph</b>	R1-2.2.3				
	<b>Negative Text</b>	<p><b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b></p> <p>The simplification of the pumping power to <math>h/\eta = \text{energy input required for pumping}</math> is not a correct statement. Pumping power is mass/unit time * pressure divided by efficiency          Proposal: Delete this statement</p>				
	<b>TF input (optional)</b>					
	<b>Withdrawal (check one)</b>	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO "Related" subsection	
		<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO "Final" subsection → (A)	
<b>Related</b>	<b>Motion and Reason (check one)</b>	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. <b>(Needs no motion.)</b>		GO TO "Persuasive" subsection	
		<input type="checkbox"/>	Negative is not related. <b>(Needs ≥2/3 votes to pass.)</b>			
			Reason	XXXX		
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)				
	<b>Discussion</b>					
		<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.			
<input type="checkbox"/>	[Negative is not related.] < 2/3		GO TO "Persuasive" subsection			
<input type="checkbox"/>	2/3 ≤ [Negative is not related.]		GO TO "Final" subsection → (B)			
<b>Persuasive</b>	<b>Motion and Reason (check one)</b>	<input type="checkbox"/>	Negative is related and persuasive. <b>(Needs &gt;1/3 votes to pass.)</b>			
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. <b>(Needs ≥2/3 votes to pass.)</b>			
			Reason	<p>The statement "<math>h/\eta = \text{energy input required for pumping}</math>. The value is 983 kJ/m<sup>3</sup> for S23, independent of temperature." is correct.</p> <p>The statement does not mention power. It is stating about energy/unit volume.</p> <p>energy = force * distance = pressure * volume            energy/unit volume = pressure</p>		
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)				
	<b>Discussion</b>					
		<b>Result of Vote (check one)</b>	8 Y-0 N; Motion passed			
<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3		<b>Is a technical change recommended? (check one)</b>	<input type="checkbox"/>	Y GO TO "Address by Technical Change Option" subsection	
<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3			<input type="checkbox"/>	N GO TO "Final" subsection → (E)	

		<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)	
		<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection	
Address by Technical Change Option	<b>Technical Change Recommendations</b>				
	Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.				
	Technical Changes	1	FROM: Section/Paragraph XXX		
			TO: Section/Paragraph xxx		
			Justification (if necessary)		
		2	FROM: Section/Paragraph XXX		
			TO: Section/Paragraph xxx		
			Justification (if necessary)		
	Motion		Negative is addressed by the technical change(s).		
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
	Discussion				
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
			<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection
			<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3	GO TO “Final” subsection → (E)
	Incorporation of the Technical Change	Motion		To incorporate the technical change(s).	
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)			
Discussion					
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.			
		<input type="checkbox"/>	90% ≤ [Agree to incorporate.]	GO TO “Final” subsection → (F)	
		<input type="checkbox"/>	[Disagree to incorporate.] > 10%	GO TO “Final” subsection → (E)	
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)				
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.		
Motion		The Negative is “not significant”.			

	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority GO TO "Final" subsection → (D)
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority GO TO "Final" subsection → (C)	
Final	(check if applicable)	<input type="checkbox"/>	(A) Withdrawn (counted under h in disposition)
		<input type="checkbox"/>	(B) Not related (counted under i in disposition)
		<input type="checkbox"/>	(C) Related and not persuasive (significant)
		<input checked="" type="checkbox"/>	(D) Not significant (counted under j in disposition)
		<input type="checkbox"/>	(E) Related and persuasive and not addressed by technical change DOCUMENT FAILS
	<input type="checkbox"/>	(F) Addressed by technical change (counted under k disposition)	
(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.	

### Negative 34

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. R1-2.2.3	
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. The statement "The value is 4.5 for S23, independent of temperature is misleading. COP is absolutely dependent upon temperature based upon the first law of thermodynamics. For the purposes of the ECF a fixed COP was derived for simplicity. Proposal: "For the purpose of performing S23 equivalent energy calculation a fixed COP value of 4.5 was selected"	
TF input (optional)			
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.	GO TO "Related" subsection
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.	GO TO "Final" subsection → (A)
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.) GO TO "Persuasive" subsection
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)
	Reason	XXXX	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)	
Discussion			
Result of Vote (check one)	<input type="checkbox"/>	XX Y-XX N; Motion passed/failed. [Negative is not related.] < 2/3	GO TO "Persuasive" subsection
	<input type="checkbox"/>	2/3 ≤ [Negative is not related.]	GO TO "Final" subsection → (B)
Motion and Reason	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)	

Persuasive	(check one)	<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			
			Reason	RNP	Following editorial change: To replace “The value is 4.5 for S23, independent of temperature” with “The value used for this ECF is 4.50, independent of temperature.” would clarify the intent of the paragraph. Perceived problem of the Negative would no longer exist with proposed editorial change.	
	Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)				
	Discussion					
	Result of Vote (check one)	8 Y 0 N; Motion passed				
	<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input type="checkbox"/>	Y	GO TO “Address by Technical Change Option” subsection
	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N	GO TO “Final” subsection → (E)
	<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)			
	<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection			
Address by Technical Change Option	<b>Technical Change Recommendations</b>					
	Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.					
	1	FROM: Section/Paragraph XXX				
		TO: Section/Paragraph xxx				
		Justification (if necessary)				
	2	FROM: Section/Paragraph XXX				
		TO: Section/Paragraph xxx				
		Justification (if necessary)				
	Motion	Negative is addressed by the technical change(s).				
	Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)				
Discussion						
Result of Vote	XX Y-XX N; Motion passed/failed.					

	(check one)	<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection	
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3	GO TO “Final” subsection → (E)	
	Incorporation of the Technical Change	Motion	To incorporate the technical change(s).		
		Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)		
		Discussion			
Result of Vote (check one)	XX Y-XX N; Motion passed/failed.				
	<input type="checkbox"/>	90% ≤ [Agree to incorporate.]	GO TO “Final” subsection → (F)		
	<input type="checkbox"/>	[Disagree to incorporate.] > 10%	GO TO “Final” subsection → (E)		
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)				
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”.	GO TO “Final” subsection → (C)	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.		
	Motion	The Negative is “not significant”.			
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)			
	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)	
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	GO TO “Final” subsection → (C)		
Final	(check if applicable)	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)	
		<input type="checkbox"/>	(B)	Not related (counted under i in disposition)	
		<input type="checkbox"/>	(C)	Related and not persuasive (significant)	
		<input checked="" type="checkbox"/>	(D)	Not significant (counted under j in disposition)	
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
		<input type="checkbox"/>	(F)	Addressed by technical change (counted under k disposition)	
	(check if applicable)	<input checked="" type="checkbox"/>	Comment generated. See Section V-(ii) Comment # NC-6		

### Negative 35

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.
		R1-2.2.3
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. The derivation uses the term Equivalent Power/Flow while the ECF units are Equivalent Energy/Volume. Proposal: Change derivation to Equivalent Energy/Volume based upon time relationship between energy and power.
TF input (optional)		

<b>Withdrawal (check one)</b>		<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO "Related" subsection	
		<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO "Final" subsection → (A)	
<b>Related</b>	<b>Motion and Reason (check one)</b>	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection	
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)			
		Reason	XXXX			
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)				
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.				
<input type="checkbox"/>		[Negative is not related.] < 2/3			GO TO "Persuasive" subsection	
<input type="checkbox"/>		2/3 ≤ [Negative is not related.]			GO TO "Final" subsection → (B)	
<b>Persuasive</b>	<b>Motion and Reason (check one)</b>	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)			
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			
		Reason	<p>The conversion between energy and power requires only a basic understanding of physics. All qualitative statements about power are true for energy once a relevant time period is defined.</p> <p>A basic goal of the document is energy efficiency analysis.. Power is the use rate of energy.</p>			
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)				
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	8 Y-0 N; Motion passed				
<input type="checkbox"/>		[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	<input type="checkbox"/>	Y	GO TO "Address by Technical Change Option" subsection
<input type="checkbox"/>		[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N	GO TO "Final" subsection → (E)
<input type="checkbox"/>		2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)			
<input checked="" type="checkbox"/>		90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection			
<b>Technical Change</b>	<b>Technical Change Recommendations</b>					
	Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.					
	FROM: Section/Paragraph XXX					

	2	TO: Section/Paragraph <b>xxx</b>		
		Justification (if necessary)		
		FROM: Section/Paragraph <b>XXX</b>		
		TO: Section/Paragraph <b>xxx</b>		
		Justification (if necessary)		
Motion		Negative is addressed by the technical change(s).		
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
Discussion				
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).] GO TO “Incorporation of the Technical Change” subsection	
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3 GO TO “Final” subsection → (E)	
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).	
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)	
	Discussion			
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.	
<input type="checkbox"/>			90% ≤ [Agree to incorporate.] GO TO “Final” subsection → (F)	
		<input type="checkbox"/>	[Disagree to incorporate.] > 10% GO TO “Final” subsection → (E)	
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)			
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”. GO TO “Final” subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”. GO TO “Final” subsection → (C)	
			Whether or not the Negative is “not significant” is decided by a vote.	
	Motion		The Negative is “not significant”.	
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)	
Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)	
	<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority	GO TO “Final” subsection → (C)	
Final (check if applicable)	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)	
	<input type="checkbox"/>	(B)	Not related (counted under i in disposition)	
	<input type="checkbox"/>	(C)	Related and not persuasive (significant)	

		x	(D)	Not significant (counted under j in disposition)
			(E)	Related and persuasive and not addressed by technical change
			(F)	Addressed by technical change (counted under k disposition)
	(check if applicable)		Comment generated. See Section V-(ii) Comment # X.	

### Negative 36

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.		
		R1-2.2.3		
Negative	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.		
		Derivation of Equivalent Power / Heat removed does not have correct units and is not useful to SME designers. The phrase "This ECF is useful if one knows the amount of heat to be removed and is interested in comparing the amounts of equivalent power needed to remove that heat at different changes in water temperature." is not correct as changes in dT is the relevant parameter. Proposal: Delete all Derivation of Equivalent Power per Heat Removed		
TF input (optional)				
Withdrawal (check one)		X	No Negative withdrawal made by Voter.	GO TO "Related" subsection
			Withdrawal document received by Standards staff on MM/DD/YYYY.	GO TO "Final" subsection → (A)
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.)	GO TO "Persuasive" subsection
			Negative is not related. (Needs ≥2/3 votes to pass.)	
		Reason	XXXX	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)		
	Discussion			
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
			[Negative is not related.] < 2/3	GO TO "Persuasive" subsection
			2/3 ≤ [Negative is not related.]	GO TO "Final" subsection → (B)
Persuasive	Motion and Reason (check one)		Negative is related and persuasive. (Needs >1/3 votes to pass.)	
		x	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)	
		Reason	"Derivation of Equivalent Power / Heat removed does not have correct units" is not true. All units are correct The equation given to calculate equivalent power needed to remove that heat does include dT as parameter.	
Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)			



	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	7 Y-0 N; Motion passed				
		<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	<input type="checkbox"/> Y	GO TO "Address by Technical Change Option" subsection
		<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/> N	GO TO "Final" subsection → (E)
		<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)		
		<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection		
<b>Address by Technical Change Option</b>	<b>Technical Change Recommendations</b>					
	Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.					
	1	<b>Technical Changes</b>	FROM: Section/Paragraph XXX			
			TO: Section/Paragraph xxx			
			Justification (if necessary)			
	2	<b>Technical Changes</b>	FROM: Section/Paragraph XXX			
			TO: Section/Paragraph xxx			
			Justification (if necessary)			
	<b>Motion</b>		Negative is addressed by the technical change(s).			
	<b>Motion by/2<sup>nd</sup> by</b>		Name (Company)/Name (Company)			
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>		XX Y-XX N; Motion passed/failed.			
<input type="checkbox"/>			2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection		
<input type="checkbox"/>			[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)		
<b>Incorporation of the Technical Change</b>	<b>Motion</b>		To incorporate the technical change(s).			
	<b>Motion by/2<sup>nd</sup> by</b>		Name (Company)/Name (Company)			
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>		XX Y-XX N; Motion passed/failed.			
<input type="checkbox"/>			90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)		
<input type="checkbox"/>			[Disagree to incorporate.] > 10%	GO TO "Final" subsection → (E)		

Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)		
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”. GO TO “Final” subsection → (D)
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”. GO TO “Final” subsection → (C)
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.
	Motion	The Negative is “not significant”.	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)	
Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority GO TO “Final” subsection → (D)	
	<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority GO TO “Final” subsection → (C)	
Final	(check if applicable)	<input type="checkbox"/>	(A) Withdrawn (counted under h in disposition)
		<input type="checkbox"/>	(B) Not related (counted under i in disposition)
		<input type="checkbox"/>	(C) Related and not persuasive (significant)
		<input checked="" type="checkbox"/>	(D) Not significant (counted under j in disposition)
		<input type="checkbox"/>	(E) Related and persuasive and not addressed by technical change DOCUMENT FAILS
		<input type="checkbox"/>	(F) Addressed by technical change (counted under k disposition)
	(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.

### Negative 37

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. R1-2.3.1	
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. The intent is to allow SME users to use their own ECF. Change to make more readable Proposal: An SME user may have developed a set of conversion factors that they prefer for their business model, the user should work with the SME supplier to use their custom ECF to produce a custom S23 report.	
TF input (optional)			
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter. GO TO “Related” subsection	
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY. GO TO “Final” subsection → (A)	
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	‘Related’ is mutually agreed upon. (Needs no motion.) GO TO “Persuasive” subsection
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)
	Reason	XXXX	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)	
Discussion			

		XX Y-XX N; Motion passed/failed.				
	Result of Vote (check one)	<input type="checkbox"/>	[Negative is not related.] < 2/3	GO TO "Persuasive" subsection		
		<input type="checkbox"/>	2/3 ≤ [Negative is not related.]	GO TO "Final" subsection → (B)		
Persuasive	Motion and Reason (check one)	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)			
		x <input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			
			Reason	The intent which is "Allowing room for consideration using SME user's original ECF" is clear without suggested change.		
	Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)				
	Discussion					
		Result of Vote (check one)	7 Y-0 N; Motion passed			
		<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input type="checkbox"/> Y	GO TO "Address by Technical Change Option" subsection
		<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/> N	GO TO "Final" subsection → (E)
		<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)		
		x <input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection		
Address by Technical Change Option	<b>Technical Change Recommendations</b>					
	Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.					
	1	Technical Changes	FROM: Section/Paragraph XXX			
			TO: Section/Paragraph xxx			
			Justification (if necessary)			
	2	Technical Changes	FROM: Section/Paragraph XXX			
			TO: Section/Paragraph xxx			
			Justification (if necessary)			
	Motion		Negative is addressed by the technical change(s).			
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)			
Discussion						
Result of Vote		XX Y-XX N; Motion passed/failed.				

	<b>(check one)</b>		<input type="checkbox"/> 2/3 ≤ [Negative is addressed by the technical change(s).]	<b>GO TO “Incorporation of the Technical Change” subsection</b>	
			<input type="checkbox"/> [Negative is not addressed by the technical change(s).] < 2/3	<b>GO TO “Final” subsection → (E)</b>	
	<b>Incorporation of the Technical Change</b>	<b>Motion</b>	To incorporate the technical change(s).		
		<b>Motion by/2<sup>nd</sup> by</b>	Name (Company)/Name (Company)		
		<b>Discussion</b>			
		<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.		
<input type="checkbox"/>	90% ≤ [Agree to incorporate.]		<b>GO TO “Final” subsection → (F)</b>		
<input type="checkbox"/>	[Disagree to incorporate.] > 10%		<b>GO TO “Final” subsection → (E)</b>		
<b>Not Significant Finding Option</b>	<b>This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)</b>				
	<b>Use of “Not significant finding option” (check one)</b>	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”.	<b>GO TO “Final” subsection → (D)</b>	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”.	<b>GO TO “Final” subsection → (C)</b>	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.		
	<b>Motion</b>	The Negative is “not significant”.			
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)			
	<b>Vote</b>	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	<b>GO TO “Final” subsection → (D)</b>	
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	<b>GO TO “Final” subsection → (C)</b>		
<b>Final</b>	<b>(check if applicable)</b>	<input type="checkbox"/>	<b>(A)</b>	Withdrawn <b>(counted under h in disposition)</b>	
		<input type="checkbox"/>	<b>(B)</b>	Not related <b>(counted under i in disposition)</b>	
		<input type="checkbox"/>	<b>(C)</b>	Related and not persuasive (significant)	
		<input checked="" type="checkbox"/>	<b>(D)</b>	Not significant <b>(counted under j in disposition)</b>	
		<input type="checkbox"/>	<b>(E)</b>	Related and persuasive and not addressed by technical change	<b>DOCUMENT FAILS</b>
		<input type="checkbox"/>	<b>(F)</b>	Addressed by technical change <b>(counted under k disposition)</b>	
	<b>(check if applicable)</b>	<input type="checkbox"/>	Comment generated. <b>See Section V-(ii) Comment # X.</b>		

### Negative 38

<b>Negative</b>	<b>Referenced Section/ Paragraph</b>	<b>*TF/TC Chapter to fill in, including text in the ballot if necessary.</b>
		Note 34
	<b>Negative Text</b>	<p><b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b></p> <p>When discussing the make-up air implications on an ECF is should be noted that current ECF for exhaust does not capture make-up air energy but only fan energy.          Proposal: The make-up energy requirements may be very significant depending upon the location of the factory that the custom ECF is based upon. Current baseline ECF does not capture energy associated with make-up air</p>

<b>TF input (optional)</b>					
<b>Withdrawal (check one)</b>	X	No Negative withdrawal made by Voter.		GO TO "Related" subsection	
		Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO "Final" subsection → (A)	
<b>Related</b>	<b>Motion and Reason (check one)</b>	X	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection
			Negative is not related. (Needs ≥2/3 votes to pass.)		
		Reason	XXXX		
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)			
	<b>Discussion</b>				
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.			
		[Negative is not related.] < 2/3		GO TO "Persuasive" subsection	
		2/3 ≤ [Negative is not related.]		GO TO "Final" subsection → (B)	
<b>Persuasive</b>		Negative is related and persuasive. (Needs >1/3 votes to pass.)			
		x	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)		
	<b>Motion and Reason (check one)</b>	Reason	<p>The document that was used as the basis of the Exhaust ECF indicates that energy to produce make-up air was taken into consideration</p> <p>Also a credibility check as following support that energy to produce make-up air was taken into consideration</p> <p>ECF for exhaust 13.3kJ/m<sup>3</sup> =13.3kPa, even the efficiency of fan is 50% if the energy were solely contributed to fan's energy to replace make-up air the pressure would be absurdly high.</p>		
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)			
	<b>Discussion</b>				
	<b>Result of Vote (check one)</b>	7 Y-0 N; Motion passed			
		[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	Y	GO TO "Address by Technical Change Option" subsection
		[Negative is related and not persuasive.] < 2/3		N	GO TO "Final" subsection → (E)
		2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)		
	x	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection		

		<b>Technical Change Recommendations</b>		
		Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.		
Address by Technical Change Option	Technical Changes	1	FROM: Section/Paragraph XXX	
			TO: Section/Paragraph xxx	
			Justification (if necessary)	
		2	FROM: Section/Paragraph XXX	
			TO: Section/Paragraph xxx	
			Justification (if necessary)	
Motion		Negative is addressed by the technical change(s).		
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
Discussion				
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).] GO TO “Incorporation of the Technical Change” subsection	
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3 GO TO “Final” subsection → (E)	
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).	
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)	
	Discussion			
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.	
<input type="checkbox"/>			90% ≤ [Agree to incorporate.] GO TO “Final” subsection → (F)	
<input type="checkbox"/>			[Disagree to incorporate.] > 10% GO TO “Final” subsection → (E)	
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)			
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”. GO TO “Final” subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”. GO TO “Final” subsection → (C)	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.	
	Motion		The Negative is “not significant”.	
	Motion by/ 2 <sup>nd</sup> by		Name (Company)/Name (Company)	
Vote		<input type="checkbox"/> XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)	

			XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)
Final	(check if applicable)		(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 and not addressed by technical change	DOCUMENT FAILS
		(F) Addressed by technical change (counted under k disposition)		
	(check if applicable)		Comment generated. See Section V-(ii) Comment # X.	

### Negative 39

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.		
		R1-2.5		
Negative	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.		
		<p>According to 9.7 Determining reasonable energy conversion factors for most process chemicals has not yet entered the state of the art. Therefore, conversion factors are not recommended for them. There is no evidence to support that "less pure processing chemicals" are more energy efficient.</p> <p>If only the Use Stage of the LCA is being considered in this document then process chemical purity in outside the scope of the document</p> <p>Proposal: Delete R1-2.5 and all subsections.</p>		
TF input (optional)				
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.	GO TO "Related" subsection	
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.	GO TO "Final" subsection → (A)	
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.)	GO TO "Persuasive" subsection
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)	
		Reason		
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)		
	Discussion	Need to correct typo at the end of para		
Result of Vote (check one)	XX Y-XX N; Motion passed/failed.			
	<input type="checkbox"/>	[Negative is not related.] < 2/3	GO TO "Persuasive" subsection	
	<input type="checkbox"/>	2/3 ≤ [Negative is not related.]	GO TO "Final" subsection → (B)	
Persuasive	Motion and Reason (check one)	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)	
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)	

		<b>Reason</b>	Process chemical are used in the use stage of SME. Therefore equivalent energy for process chemical is relevant to use stage of SME life cycle.			
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)				
	<b>Discussion</b>	Need to correct typo at the end of para				
	<b>Result of Vote (check one)</b>	7 Y-0 N; Motion passed				
		<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	<input type="checkbox"/> Y	GO TO "Address by Technical Change Option" subsection
		<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/> N	GO TO "Final" subsection → (E)
		<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)		
		<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection		
<b>Address by Technical Change Option</b>	<b>Technical Change Recommendations</b>					
	Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.					
	1	FROM: Section/Paragraph XXX				
		TO: Section/Paragraph xxx				
		Justification (if necessary)				
	2	FROM: Section/Paragraph XXX				
		TO: Section/Paragraph xxx				
		Justification (if necessary)				
		<b>Motion</b>	Negative is addressed by the technical change(s).			
		<b>Motion by/2<sup>nd</sup> by</b>	Name (Company)/Name (Company)			
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.				
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]		<input type="checkbox"/>	GO TO "Incorporation of the Technical Change" subsection
	<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3		<input type="checkbox"/>	GO TO "Final" subsection → (E)	
<b>Inco rpor</b>	<b>Motion</b>	To incorporate the technical change(s).				
	<b>Motion by/2<sup>nd</sup> by</b>	Name (Company)/Name (Company)				



		Discussion	
		Result of Vote (check one)	<input checked="" type="checkbox"/> XX Y-XX N; Motion passed/failed. <input type="checkbox"/> 90% ≤ [Agree to incorporate.] → (F) <input type="checkbox"/> [Disagree to incorporate.] > 10% → (E)
Not Significant Finding Option	This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.4.4.2)		
	Use of "Not significant finding option" (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant". GO TO "Final" subsection → (D)
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative "significant". GO TO "Final" subsection → (C)
		<input type="checkbox"/>	Whether or not the Negative is "not significant" is decided by a vote.
	Motion	The Negative is "not significant".	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)	
Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority GO TO "Final" subsection → (D)	
	<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority GO TO "Final" subsection → (C)	
Final	(check if applicable)	<input type="checkbox"/>	(A) Withdrawn (counted under h in disposition)
		<input type="checkbox"/>	(B) Not related (counted under i in disposition)
		<input type="checkbox"/>	(C) Related and not persuasive (significant)
		<input checked="" type="checkbox"/>	(D) Not significant (counted under j in disposition)
		<input type="checkbox"/>	(E) Related and persuasive and not addressed by technical change DOCUMENT FAILS
		<input type="checkbox"/>	(F) Addressed by technical change (counted under k disposition)
	(check if applicable)	<input checked="" type="checkbox"/>	Comment generated. See Section VI-#1.

### Negative 40

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. R1-2.6.4	
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. Heat capacity is not the correct terminology Proposal: Change "heat capacity" to specific heat.	
TF input (optional)			
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter. GO TO "Related" subsection	
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY. GO TO "Final" subsection → (A)	
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.) GO TO "Persuasive" subsection
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)
	Reason	XXXX	

	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)			
	Discussion				
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.			
		<input type="checkbox"/>	[Negative is not related.] < 2/3	GO TO “Persuasive” subsection	
	<input type="checkbox"/>	2/3 ≤ [Negative is not related.]	GO TO “Final” subsection → (B)		
Persuasive	Motion and Reason (check one)	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)		
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)		
		Reason	An editorial change to replace “heat capacity” to specific heat” would eliminate the perceived issue  (The specific heat capacity, often simply called specific heat, is the heat capacity per unit mass of a material.)		
	Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)			
	Discussion				
Result of Vote (check one)	7 Y-0 N; Motion passed/				
	<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input type="checkbox"/>	Y GO TO “Address by Technical Change Option” subsection
	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N GO TO “Final” subsection → (E)
	<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)		
	<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection		
Address by Technical Change Option	<b>Technical Change Recommendations</b>				
	Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.				
	1	FROM: Section/Paragraph XXX			
		TO: Section/Paragraph xxx			
Justification (If necessary)					
2	FROM: Section/Paragraph XXX				
	TO: Section/Paragraph xxx				

		<b>Justification (if necessary)</b>	
	<b>Motion</b>	Negative is addressed by the technical change(s).	
	<b>Motion by/2<sup>nd</sup> by</b>	Name (Company)/Name (Company)	
	<b>Discussion</b>		
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.	
		<input type="checkbox"/> 2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection
		<input type="checkbox"/> [Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)
<b>Incorporation of the Technical Change</b>	<b>Motion</b>	To incorporate the technical change(s).	
	<b>Motion by/2<sup>nd</sup> by</b>	Name (Company)/Name (Company)	
	<b>Discussion</b>		
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.	
		<input type="checkbox"/> 90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)
<input type="checkbox"/> [Disagree to incorporate.] > 10%	GO TO "Final" subsection → (E)		
<b>Not Significant Finding Option</b>	<b>This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.4.4.2)</b>		
	<b>Use of "Not significant finding option" (check one)</b>	<input checked="" type="checkbox"/> It is mutually agreed upon to term the Negative "not significant".	GO TO "Final" subsection → (D)
		<input type="checkbox"/> It is mutually agreed upon to term the Negative "significant".	GO TO "Final" subsection → (C)
		<input type="checkbox"/> Whether or not the Negative is "not significant" is decided by a vote.	
	<b>Motion</b>	The Negative is "not significant".	
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)	
	<b>Vote</b>	<input type="checkbox"/> XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)
<input type="checkbox"/> XX Y-XX N; Motion failed with simple majority		GO TO "Final" subsection → (C)	
<b>Final</b>	<b>(check if applicable)</b>	<input type="checkbox"/> (A) Withdrawn (counted under h in disposition)	
		<input type="checkbox"/> (B) Not related (counted under i in disposition)	
		<input type="checkbox"/> (C) Related and not persuasive (significant)	
		<input checked="" type="checkbox"/> (D) Not significant (counted under j in disposition)	
		<input type="checkbox"/> (E) Related and persuasive and not addressed by technical change	DOCUMENT FAILS
		<input type="checkbox"/> (F) Addressed by technical change (counted under k disposition)	
	<b>(check if applicable)</b>	<input checked="" type="checkbox"/> Comment generated. See Section V-(ii) Comment # NC-7	
<b>Negative 41</b>			
<b>9 at</b>	<b>Referenced</b>	*TF/TC Chapter to fill in, including text in the ballot if necessary.	

	<b>Section/ Paragraph</b>	R1-2.6.5				
	<b>Negative Text</b>	<p><b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b></p> <p>Change “Heat Load Burden” to Air Conditioning (heat load, cooling load) to match Table 3</p>				
	<b>TF input (optional)</b>					
	<b>Withdrawal (check one)</b>	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO “Related” subsection	
		<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO “Final” subsection → (A)	
Related	<b>Motion and Reason (check one)</b>	<input checked="" type="checkbox"/>	‘Related’ is mutually agreed upon. <b>(Needs no motion.)</b>		GO TO “Persuasive” subsection	
		<input type="checkbox"/>	Negative is not related. <b>(Needs ≥2/3 votes to pass.)</b>			
			Reason	XXXX		
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)				
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.				
		<input type="checkbox"/>	[Negative is not related.] < 2/3		GO TO “Persuasive” subsection	
<input type="checkbox"/>		2/3 ≤ [Negative is not related.]		GO TO “Final” subsection → (B)		
Persuasive	<b>Motion and Reason (check one)</b>	<input type="checkbox"/>	Negative is related and persuasive. <b>(Needs &gt;1/3 votes to pass.)</b>			
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. <b>(Needs ≥2/3 votes to pass.)</b>			
			Reason	An editorial change to replace “Heat Load Burden” with “ Air Conditioning (heat load, cooling load)” would eliminate the perceived issue		
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)				
	<b>Discussion</b>					
	<b>Result of Vote (check one)</b>	7 Y-0N; Motion passed				
		<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	<input type="checkbox"/>	Y GO TO “Address by Technical Change Option” subsection
<input type="checkbox"/>		[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N GO TO “Final” subsection → (E)	
<input type="checkbox"/>		2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)			
<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection				
Technical Change Recommendations	<b>Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.</b>					

	Technical Changes	1	FROM: Section/Paragraph <b>XXX</b>	
			TO: Section/Paragraph <b>xxx</b>	
			Justification (if necessary)	
		2	FROM: Section/Paragraph <b>XXX</b>	
			TO: Section/Paragraph <b>xxx</b>	
			Justification (if necessary)	
Motion		Negative is addressed by the technical change(s).		
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
Discussion				
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).	
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)	
	Discussion			
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.	
			<input type="checkbox"/>	90% ≤ [Agree to incorporate.]
<input type="checkbox"/>			[Disagree to incorporate.] > 10%	GO TO "Final" subsection → (E)
Not Significant Finding Option	This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.4.4.2)			
	Use of "Not significant finding option" (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant".	GO TO "Final" subsection → (D)
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative "significant".	GO TO "Final" subsection → (C)
		<input type="checkbox"/>	Whether or not the Negative is "not significant" is decided by a vote.	
	Motion		The Negative is "not significant".	
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)	
	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)	
Final	(check if applicable)	<input type="checkbox"/>	(A) Withdrawn (counted under h in disposition)	
		<input type="checkbox"/>	(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 and not addressed by technical change
			(F)	Addressed by technical change (counted under k disposition)
	(check if applicable)	X		Comment generated. See Section V-(ii) Comment # NC-8

### Negative 42

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.		
		R1-3		
Negative	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.		
		Update formulas to match new ECF introduce in section 9		
TF input (optional)				
Withdrawal (check one)		X	No Negative withdrawal made by Voter.	GO TO "Related" subsection
			Withdrawal document received by Standards staff on MM/DD/YYYY.	GO TO "Final" subsection → (A)
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.)	GO TO "Persuasive" subsection
			Negative is not related. (Needs ≥2/3 votes to pass.)	
		Reason	XXXX	
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)		
	Discussion			
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
			[Negative is not related.] < 2/3	GO TO "Persuasive" subsection
			2/3 ≤ [Negative is not related.]	GO TO "Final" subsection → (B)
Persuasive	Motion and Reason (check one)		Negative is related and persuasive. (Needs >1/3 votes to pass.)	
		X	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)	

						Reason	<p>An Editorial change to replace  Estimated annual energy equivalent: <math>698 \text{ m}^3 \times 5.62 \times 10^3 \text{ kJ/m}^3</math> (1.56 kWh/m<sup>3</sup>) = <math>3.92 \times 10^6 \text{ kJ}</math> (1.09 × 10<sup>3</sup> kWh)  [ECF = (0.258 × ΔT + 0.273) × 3.6 × 10<sup>3</sup> kJ/m<sup>3</sup> [(0.258 × ΔT + 0.273) kWh/m<sup>3</sup> ] = 5.62 × 10<sup>3</sup> kJ/m<sup>3</sup> (1.56 kWh/m<sup>3</sup>)]  with  Estimated annual energy equivalent = annual amount used * ECF  = [929 (kJ/m<sup>3</sup>K) × ΔT + 983 (kJ/m<sup>3</sup>)] * 698 m<sup>3</sup>  = [929 (kJ/m<sup>3</sup>K) × 5 K + 983 (kJ/m<sup>3</sup>)] * 698 m<sup>3</sup>  = 5.63 × 10<sup>3</sup> kJ/m<sup>3</sup>  would address the Negative.</p>					
							Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)				
							Discussion					
							Result of Vote (check one)	7 Y-0 N; Motion passed.				
								[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)		Y	GO TO "Address by Technical Change Option" subsection
								[Negative is related and not persuasive.] < 2/3			N	GO TO "Final" subsection → (E)
								$2/3 \leq$ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)			
							x	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection			
Address by Technical Change Option	<b>Technical Change Recommendations</b>											
	Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.											
	1	FROM: Section/Paragraph XXX										
		TO: Section/Paragraph xxx										
		Justification (if necessary)										
	2	FROM: Section/Paragraph XXX										
		TO: Section/Paragraph xxx										
		Justification (if necessary)										
	Motion						Negative is addressed by the technical change(s).					
	Motion by/2 <sup>nd</sup> by						Name (Company)/Name (Company)					
Discussion												

	Result of Vote (check one)	<input type="checkbox"/>	XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection	
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)	
	Incorporation of the Technical Change	Motion	To incorporate the technical change(s).		
		Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)		
	Result of Vote (check one)	<input type="checkbox"/>	XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/>	90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)	
	<input type="checkbox"/>	[Disagree to incorporate.] > 10%	GO TO "Final" subsection → (E)		
	This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.4.4.2)				
Not Significant Finding Option	Use of "Not significant finding option" (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant".	GO TO "Final" subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative "significant".	GO TO "Final" subsection → (C)	
		<input type="checkbox"/>	Whether or not the Negative is "not significant" is decided by a vote.		
	Motion	The Negative is "not significant".			
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)			
	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)	
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)		
Final	(check if applicable)	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)	
		<input type="checkbox"/>	(B)	Not related (counted under i in disposition)	
		<input type="checkbox"/>	(C)	Related and not persuasive (significant)	
		<input checked="" type="checkbox"/>	(D)	Not significant (counted under j in disposition)	
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
		<input type="checkbox"/>	(F)	Addressed by technical change (counted under k disposition)	
	(check if applicable)	<input checked="" type="checkbox"/>	Comment generated. See Section V-(ii) Comment # NC-9		

### Negative 43

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.
		Figure R1-1 Heat Load Calculation Mode
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.



		Delete °C, as °C and K are identical units when presented in absolute they are the same and no dual unit is needed Incorrect dual unit for specific heat: 1.17 kJ (3.24 × 10 <sup>-4</sup> kWh)/(m3K) Proposal: Heat Removal per year = (5K(°C) × 1.12 × 10 <sup>7</sup> m <sup>3</sup> × 1.17 kJ/m3K = 6.52 × 10 <sup>7</sup> kJ (1.81 × 10 <sup>4</sup> kWh) Same comment on Water Specific Heat			
	<b>TF input (optional)</b>				
	<b>Withdrawal (check one)</b>	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO "Related" subsection
		<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO "Final" subsection → (A)
Related	<b>Motion and Reason (check one)</b>	<input type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection
		<input checked="" type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)		
		Reason	No "(°C)" in the clean copy (The mark-up copy is provided for convenience of voters to see change history)		
	<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)			
	<b>Discussion</b>				
	<b>Result of Vote (check one)</b>	7 Y-0 N; Motion passed.			
		<input type="checkbox"/>	[Negative is not related.] < 2/3		GO TO "Persuasive" subsection
	<input checked="" type="checkbox"/>	2/3 ≤ [Negative is not related.]		GO TO "Final" subsection → (B)	
Persuasive	<b>Motion and Reason (check one)</b>	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)		
		<input type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)		
			Reason		
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)			
	<b>Discussion</b>				
	<b>Result of Vote (check one)</b>	XX Y-XX N; Motion passed/failed.			
		<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	<b>Is a technical change recommended? (check one)</b>	<input type="checkbox"/>
<input type="checkbox"/>		[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N GO TO "Final" subsection → (E)
<input type="checkbox"/>		2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)		
	<input type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection		
Technical Change	<b>Technical Change Recommendations</b> Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.				

	Technical Changes	1	FROM: Section/Paragraph XXX	
			TO: Section/Paragraph xxx	
			Justification (if necessary)	
		2	FROM: Section/Paragraph XXX	
			TO: Section/Paragraph xxx	
			Justification (if necessary)	
Motion		Negative is addressed by the technical change(s).		
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
Discussion				
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).	
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)	
	Discussion			
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.	
<input type="checkbox"/>			90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)
<input type="checkbox"/>			[Disagree to incorporate.] > 10%	GO TO "Final" subsection → (E)
Not Significant Finding Option	This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.4.4.2)			
	Use of "Not significant finding option" (check one)	<input type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant".	GO TO "Final" subsection → (D)
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative "significant".	GO TO "Final" subsection → (C)
		<input type="checkbox"/>	Whether or not the Negative is "not significant" is decided by a vote.	
	Motion		The Negative is "not significant".	
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)	
	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)	
Final	(check if applicable)	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)
		x	(B)	Not related (counted under i in disposition)

		<b>(C)</b>	Related and not persuasive (significant)
		<b>(D)</b>	Not significant <b>(counted under j in disposition)</b>
		<b>(E)</b>	Related and persuasive and not addressed by technical change <b>DOCUMENT FAILS</b>
		<b>(F)</b>	Addressed by technical change <b>(counted under k disposition)</b>
	<b>(check if applicable)</b>		Comment generated. <b>See Section V-(ii) Comment # X.</b>

### Negative 44

Negative	Referenced Section/ Paragraph	<b>*TF/TC Chapter to fill in, including text in the ballot if necessary.</b>	
		Note 36	
Negative	Negative Text	<b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b>	
		If only the Use Stage of the LCA is being considered in this document then GHG Protocol Scope 2 emission factors such as the source of electricity outside the scope of the document Proposal: Delete Note	
TF input (optional)			
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.	GO TO "Related" subsection
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.	GO TO "Final" subsection → (A)
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. <b>(Needs no motion.)</b> GO TO "Persuasive" subsection
		<input type="checkbox"/>	Negative is not related. <b>(Needs ≥2/3 votes to pass.)</b>
		Reason	XXXX
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)	
	Discussion		
Result of Vote (check one)	<input type="checkbox"/>	[Negative is not related.] < 2/3	GO TO "Persuasive" subsection
	<input type="checkbox"/>	2/3 ≤ [Negative is not related.]	GO TO "Final" subsection → (B)
Persuasive	Motion and Reason (check one)	<input type="checkbox"/>	Negative is related and persuasive. <b>(Needs &gt;1/3 votes to pass.)</b>
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. <b>(Needs ≥2/3 votes to pass.)</b>
		Reason	Negative is nothing to do with the NOTE
	Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)	
	Discussion	TF recommends to delete the NOTE. Why is this note recommended to be deleted? It is not very useful.	
Result of Vote	7 Y-0 N; Motion passed		

	(check one)		[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)		Y	GO TO "Address by Technical Change Option" subsection	
			[Negative is related and not persuasive.] < 2/3			N	GO TO "Final" subsection → (E)	
			2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)				
		x	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection				
Address by Technical Change Option	<b>Technical Change Recommendations</b>							
	Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.							
	Technical Changes	1	FROM: Section/Paragraph XXX					
			TO: Section/Paragraph xxx					
			Justification (if necessary)					
		2	FROM: Section/Paragraph XXX					
			TO: Section/Paragraph xxx					
			Justification (if necessary)					
	Motion		Negative is addressed by the technical change(s).					
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)					
	Discussion							
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.					
			2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection				
		[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)					
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).					
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)					
	Discussion							
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.					
			90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)				
		[Disagree to incorporate.] > 10%	GO TO "Final" subsection → (E)					
Significant Finding	This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.4.4.2)							
	Use of "Not significant"	x	It is mutually agreed upon to term the Negative "not significant".				GO TO "Final" subsection → (D)	

	<b>finding option” (check one)</b>	<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”.	<b>GO TO “Final” subsection → (C)</b>	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.		
	<b>Motion</b>	The Negative is “not significant”.			
	<b>Motion by/ 2<sup>nd</sup> by</b>	Name (Company)/Name (Company)			
	<b>Vote</b>	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	<b>GO TO “Final” subsection → (D)</b>	
<input type="checkbox"/>		XX Y-XX N; Motion failed with simple majority	<b>GO TO “Final” subsection → (C)</b>		
<b>Final</b>	<b>(check if applicable)</b>	<input type="checkbox"/>	<b>(A)</b>	Withdrawn <b>(counted under h in disposition)</b>	
		<input type="checkbox"/>	<b>(B)</b>	Not related <b>(counted under i in disposition)</b>	
		<input type="checkbox"/>	<b>(C)</b>	Related and not persuasive (significant)	
		<input checked="" type="checkbox"/>	<b>(D)</b>	Not significant <b>(counted under j in disposition)</b>	
		<input type="checkbox"/>	<b>(E)</b>	Related and persuasive and not addressed by technical change	<b>DOCUMENT FAILS</b>
		<input type="checkbox"/>	<b>(F)</b>	Addressed by technical change <b>(counted under k disposition)</b>	
	<b>(check if applicable)</b>	<input checked="" type="checkbox"/>	Comment generated. <b>See Section V-(ii) Comment # NC-10</b>		

### Disposition of Voting Interest Reject 1

Check only when the Document has not been failed.

44	Original number (#) of Negatives	<b>(g)</b>	
0	Number of Negatives withdrawn	<b>(h)</b>	
1	Number of Negatives found not related	<b>(i)</b>	
41	Number of Negatives found not significant	<b>(j)</b>	
2	Number of Negatives addressed by technical change <b>(Negative becomes not significant)</b>	<b>(k)</b>	
<b>Final</b>	<input checked="" type="checkbox"/>	$g - (h + i + j + k) = 0$	<b>Reject is Not Valid and is not included in the denominator of § VI. Approval Conditions Check</b>
	<input type="checkbox"/>	$g - (h + i + j + k) > 0$	<b>Reject is included in the denominator of § VI. Approval Conditions Check</b>
	<input type="checkbox"/>	Reject without a Negative	<b>Not Valid</b>

Note: If all of the Negatives included with a Reject Vote are withdrawn, determined to be not related, or determined to be not significant, the Reject Vote is not valid. (Regulations ¶ 9.4.3.3)

Note: A Negative addressed by a technical change is automatically considered to be not significant. (Regulations ¶ 9.6.4.4.2)

### Voting Interest Reject 2 (Voting Interest Name: **SCREEN**)

#### Voter Reject 1 (Voter: **Imamiya**)

##### Negative 1

<b>Negati ve</b>	<b>Referenced Section/ Paragraph</b>	<b>*TF/TC Chapter to fill in, including text in the ballot if necessary.</b>
		5.2.11 performance factor

	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.				
		The performance factor should include measurable metrics. I suggest rewrite the definition of PF and the objective energy efficiency improvement evaluation method (12.3) use PF for evaluation also.				
	TF input (optional)					
	Withdrawal (check one)	X	No Negative withdrawal made by Voter.	GO TO "Related" subsection		
			Withdrawal document received by Standards staff on MM/DD/YYYY.	GO TO "Final" subsection → (A)		
Related	Motion and Reason (check one)	X	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection	
			Negative is not related. (Needs ≥2/3 votes to pass.)			
		Reason	XXXX			
	Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)				
	Discussion					
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.				
		[Negative is not related.] < 2/3		GO TO "Persuasive" subsection		
		2/3 ≤ [Negative is not related.]		GO TO "Final" subsection → (B)		
Persuasive	Motion and Reason (check one)		Negative is related and persuasive. (Needs >1/3 votes to pass.)			
		x	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			
		Reason	No justification is given why current definition is technically flawed. It was the specific intention of the TF that performance factor be a subjective value. If comparative metrics (relevant to energy use) are identified then the Objective Energy Efficiency improvement method should be utilized.			
	Motion by/ 2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)				
	Discussion					
	Result of Vote (check one)	6Y-0 N; Motion passed				
			[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	Y	GO TO "Address by Technical Change Option" subsection
		[Negative is related and not persuasive.] < 2/3		N	GO TO "Final" subsection → (E)	
		2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)			
	x	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection			

		<b>Technical Change Recommendations</b>		
		Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.		
Address by Technical Change Option	1	FROM: Section/Paragraph XXX		
		TO: Section/Paragraph xxx		
		Justification (if necessary)		
	2	FROM: Section/Paragraph XXX		
		TO: Section/Paragraph xxx		
		Justification (if necessary)		
Motion		Negative is addressed by the technical change(s).		
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
Discussion				
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).] GO TO “Incorporation of the Technical Change” subsection	
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3 GO TO “Final” subsection → (E)	
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).	
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)	
	Discussion			
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.	
<input type="checkbox"/>			90% ≤ [Agree to incorporate.] GO TO “Final” subsection → (F)	
<input type="checkbox"/>			[Disagree to incorporate.] > 10% GO TO “Final” subsection → (E)	
Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.4.4.2)			
	Use of “Not significant finding option” (check one)	<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”. GO TO “Final” subsection → (D)	
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”. GO TO “Final” subsection → (C)	
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.	
	Motion		The Negative is “not significant”.	
	Motion by/ 2 <sup>nd</sup> by		Name (Company)/Name (Company)	
Vote		<input type="checkbox"/> XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)	

			XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)	
Final	(check if applicable)		(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 and not addressed by technical change	DOCUMENT FAILS
			(F)	Addressed by technical change (counted under k disposition)	
	(check if applicable)		Comment generated. See Section V-(ii) Comment # X.		

Negative 5

Negative 6

### Disposition of Voting Interest Reject 1

Check only when the Document has not been failed.

1	Original number (#) of Negatives	(g)	
0	Number of Negatives withdrawn	(h)	
0	Number of Negatives found not related	(i)	
1	Number of Negatives found not significant	(j)	
0	Number of Negatives addressed by technical change (Negative becomes not significant)	(k)	
Final	x	$g - (h + i + j + k) = 0$	Reject is Not Valid and is not included in the denominator of § VI. Approval Conditions Check
		$g - (h + i + j + k) > 0$	Reject is included in the denominator of § VI. Approval Conditions Check
		Reject without a Negative	Not Valid

Note: If all of the Negatives included with a Reject Vote are withdrawn, determined to be not related, or determined to be not significant, the Reject Vote is not valid. (Regulations ¶ 9.4.3.3)

Note: A Negative addressed by a technical change is automatically considered to be not significant. (Regulations ¶ 9.6.4.4.2)

## IV. Other Technical Issues

Note: TC Chapter may choose to address a technical issue that is not part of a Negative received on a Letter Ballot (i.e., a Comment or a reason not addressed by a Vote response) by handling it as a Negative and finding it related and technically persuasive. The TC Chapter may then fail the Document or address such technical issue by using the procedure defined in Regulations § 9.6.4.3 to make a technical change to the Document. (Regulations ¶ 9.6.2.4.5)

Technical Issue	Origin	*TF/TC Chapter to choose Comment # (Voter: Name and company) / A reason not addressed by a Vote response
	Referenced Section/ Paragraph	*TF/TC Chapter to fill in including text in the ballot as appropriate.



	Reason	*Original Comment text, if applicable, and problem statement, including justification and suggestion, should be copied.				
Handle technical issue identified above as a Negative.						
Related	Motion and Reason (check one)		‘Related’ is mutually agreed upon. (Needs no motion.)		GO TO “Persuasive” subsection	
			Negative is not related and assigned to TF. (Needs ≥2/3 votes to pass.)			
			Negative is not related and placed on agenda of current TC Chapter meeting as new business. (Needs ≥2/3 votes to pass.)			
		Reason	XXXX			
	Motion by/ 2nd by	Name (Company)/Name (Company)				
	Discussion					
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.				
		[Negative is not related.] <2/3			GO TO “Persuasive” subsection	
		2/3 ≤ [Negative is not related] and assigned to TF.			GO TO “Final” subsection → (B)	
	2/3 ≤ [Negative is not related] and placed on agenda of current TC Chapter meeting as new business.					
Persuasive	Motion and Reason (check one)		Negative is related and persuasive. (Needs >1/3 votes to pass.)			
			Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			
		Reason	XXXX			
	Motion by/ 2nd by	Name (Company)/Name (Company)				
	Discussion					
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.				
			[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	Y	GO TO “Address by Technical Change Option” subsection
		[Negative is related and not persuasive.] < 2/3		N	GO TO “Final” subsection → (E)	
	2/3 ≤ [Negative is related and not persuasive.] < 90%		GO TO “Final” subsection → (C)			
Address by Technical Change Option	Technical Change Recommendations					
	Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.					
	1	FROM: Section/Paragraph XXX				
		TO: Section/Paragraph xxx				
Justification (if necessary)						

2	FROM: Section/Paragraph XXX			
	TO: Section/Paragraph xxx			
	Justification (if necessary)			
Motion		Negative is addressed by the technical change(s).		
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)		
Discussion				
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.		
		<input type="checkbox"/> 2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection	
		<input type="checkbox"/> [Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)	
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).	
	Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)	
	Discussion			
	Result of Vote (check one)		XX Y-XX N; Motion passed/failed.	
<input type="checkbox"/> 90% ≤ [Agree to incorporate.]			GO TO "Final" subsection → (F)	
<input type="checkbox"/> [Disagree to incorporate.] >10%			GO TO "Final" subsection → (E)	
Final	(check one)	<input type="checkbox"/> (B)	Not related	
		<input type="checkbox"/> (C)	Related and not persuasive	
		<input type="checkbox"/> (E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
		<input type="checkbox"/> (F)	Addressed by technical change	
	(check if applicable)	Comment generated. See Section V-(ii) Comment # X.		

## V. Comments

### V- (i) Voters' Comments

Commenter 1 (McCafferty, William/Nikon) - Comment 1

Comment	*TF/TC Chapter to fill in section/paragraph #, if necessary.		
	1.1 Didn't want to reject the document since I have no technical reason for doing so. However, I would like to comment that the acronym SME in other places means Small to Medium Enterprise indicating a type of business. I wonder if it is possible to have another acronym such as SMEq		
	The TC Chapter agreed to do one of the following actions.		

		<b>*No motion is required in this step.</b>	
		<input type="checkbox"/>	Already addressed by Commenter #, Comment #
		<input checked="" type="checkbox"/>	No further action was taken by the TC Chapter.
		<input type="checkbox"/>	Refer to the TF for more consideration.
		<input type="checkbox"/>	New Business
		<input type="checkbox"/>	Editorial Change
		<input type="checkbox"/>	<b>Case 1: No vote in this section:</b>
			<b>To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.</b>
		<input type="checkbox"/>	<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>
Editorial Changes	1	FROM: Section/Paragraph <b>xxx</b>	
		TO: Section/Paragraph <b>xxx</b>	
		Justification (If necessary)	
	2	FROM: Section/Paragraph <b>xxx</b>	
		TO: Section/Paragraph <b>xxx</b>	
		Justification (If necessary)	
Motion		To approve above editorial change(s)	
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)	
Discussion		XXXX	
Vote		XX Y-XX N; Motion passed/failed.	

This table is needed for each Comment.

Commenter 2 (Edward Karl /AMAT) –  
Comment 1 AMAT-45

Comment	<b>*TF/TC Chapter to fill in section/paragraph #, if necessary.</b>	
	5.2.11 Spelling. "Judgement" is typically the British spelling while "judgment" is the US accepted spelling	
Action	The TC Chapter agreed to do one of the following actions.	
	<b>*No motion is required in this step.</b>	
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #

	X	No further action was taken by the TC Chapter.
		Refer to the TF for more consideration.
		New Business
		Editorial Change
	Options for editorial change (check one)	<b>Case 1: No vote in this section:</b> <b>To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.</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>
Editorial Changes	1	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)
	2	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)
Motion	To approve above editorial change(s)	
Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
Discussion	XXXX	
Vote	XX Y-XX N; Motion passed/failed.	

**Comment 2 AMAT-46**

Comment	<b>*TF/TC Chapter to fill in section/paragraph #, if necessary.</b>	
	6.2	<p>Given the state of the industry is a vague and arbitrary statement, what state? Business state?</p> <p>Proposal: The use stage of the SME life cycle appears to be the most effective stage to analyze for energy efficiency improvement opportunities. The energy used in the use stage is the best derived from the use rate measurement of utilities and materials during that stage</p>
Action	<b>The TC Chapter agreed to do one of the following actions.</b>	
	<b>*No motion is required in this step.</b>	
		Already addressed by Commenter #, Comment #
		No further action was taken by the TC Chapter.
		Refer to the TF for more consideration.
	X	New Business

		Editorial Change
	Options for editorial change (check one)	<b>Case 1: No vote in this section:</b> <b>To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.</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>
		FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
Editorial Changes	1	Justification (If necessary)
		FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
Editorial Changes	2	Justification (If necessary)
		FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
Motion	To approve above editorial change(s)	
Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
Discussion	XXXX	
Vote	XX Y-XX N; Motion passed/failed.	

**Comment 3 AMAT-47**

Comment	<b>*TF/TC Chapter to fill in section/paragraph #, if necessary.</b>	
	6.4 Typo: remove the "-" in front of the word "their"	
Action	<b>The TC Chapter agreed to do one of the following actions.</b>	
	<b>*No motion is required in this step.</b>	
		Already addressed by Commenter #, Comment #
		No further action was taken by the TC Chapter.
		Refer to the TF for more consideration.
		New Business
	X	Editorial Change
	Options for editorial change (check one)	<b>Case 1: No vote in this section:</b> <b>To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.</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>
		X

<b>Editorial Changes</b>	1	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)
	2	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)
<b>Motion</b>		To approve above editorial change(s)
<b>Motion by/2<sup>nd</sup> by</b>		Name (Company)/Name (Company)
<b>Discussion</b>		XXXX
<b>Vote</b>		XX Y-XX N; Motion passed/failed.

**Comment 4 AMAT-48**

<b>Comment</b>	<b>*TF/TC Chapter to fill in section/paragraph #, if necessary.</b>	
	6.7 Everybody knows that semiconductor manufacturing processing is complex and energy intensive, however the quoted 1.5 kWh/cm2 doesn't convey the scale of energy consumed as there is nothing to compare with Recommendation: Remove this section as it does not contribute any guidance on energy conservation and efficiency.	
<b>Action</b>	<b>The TC Chapter agreed to do one of the following actions.</b>	
	<b>*No motion is required in this step.</b>	
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #
	<input checked="" type="checkbox"/>	No further action was taken by the TC Chapter.
	<input type="checkbox"/>	Refer to the TF for more consideration.
	<input type="checkbox"/>	New Business
<b>Options for editorial change (check one)</b>	<input type="checkbox"/>	<b>Case 1: No vote in this section:</b> <b>To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.</b>
	<input type="checkbox"/>	<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>
	<input type="checkbox"/>	
	<input type="checkbox"/>	
<b>Editorial Change</b>	1	FROM: Section/Paragraph xxx

		TO: Section/Paragraph xxx
		Justification (If necessary)
	2	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)
Motion		To approve above editorial change(s)
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)
Discussion		XXXX
Vote		XX Y-XX N; Motion passed/failed.

**Comment 5 AMAT-49**

Comment	<b>*TF/TC Chapter to fill in section/paragraph #, if necessary.</b>	
	Note11: The reference is fairly outdate and may not reflect current state of technology. Recommendation: Remove this section as it does not contribute any guidance on energy conservation and efficiency.	
Action	<b>The TC Chapter agreed to do one of the following actions.</b>	
	<b>*No motion is required in this step.</b>	
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #
	<input checked="" type="checkbox"/>	No further action was taken by the TC Chapter.
	<input type="checkbox"/>	Refer to the TF for more consideration.
	<input type="checkbox"/>	New Business
	<input type="checkbox"/>	Editorial Change
	Options for editorial change (check one)	<b>Case 1: No vote in this section:</b> <b>To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.</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>
Editorial Changes	1	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)

2	FROM: Section/Paragraph xxx
	TO: Section/Paragraph xxx
	Justification (If necessary)
Motion	To approve above editorial change(s)
Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)
Discussion	XXXX
Vote	XX Y-XX N; Motion passed/failed.

**Comment 6 AMAT-50**

Comment	<b>*TF/TC Chapter to fill in section/paragraph #, if necessary.</b>	
	7.3	Readability and processes require utilities and materials and are not an impact to the SME Proposed: Change "impact" to requirements
Action	<b>The TC Chapter agreed to do one of the following actions.</b>	
	<b>*No motion is required in this step.</b>	
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #
	<input checked="" type="checkbox"/>	No further action was taken by the TC Chapter.
	<input type="checkbox"/>	Refer to the TF for more consideration.
	<input type="checkbox"/>	New Business
	Options for editorial change (check one)	<b>Case 1: No vote in this section:</b>
		<b>To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.</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>
Editorial Changes	1	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)
	2	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)



Motion	To approve above editorial change(s)
Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)
Discussion	XXXX
Vote	XX Y-XX N; Motion passed/failed.

**Comment 7 AMAT-51**

Comment	<b>*TF/TC Chapter to fill in section/paragraph #, if necessary.</b>	
	Table 3 Typo: put a space in front of KJ for Vacuum, CDA and HPCDA	
Action	<b>The TC Chapter agreed to do one of the following actions.</b>	
	<b>*No motion is required in this step.</b>	
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #
	<input type="checkbox"/>	No further action was taken by the TC Chapter.
	<input type="checkbox"/>	Refer to the TF for more consideration.
	<input type="checkbox"/>	New Business
	<input checked="" type="checkbox"/>	Editorial Change
	Options for editorial change (check one)	<input checked="" type="checkbox"/> <b>Case 1: No vote in this section:</b> <b>To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.</b>
		<input type="checkbox"/> <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>
	1	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
Justification (If necessary)		
2	FROM: Section/Paragraph xxx	
	TO: Section/Paragraph xxx	
	Justification (If necessary)	
Motion	To approve above editorial change(s)	
Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
Discussion	XXXX	
Vote	XX Y-XX N; Motion passed/failed.	

**Comment 8 AMAT-52**

<b>Comment</b>	*TF/TC Chapter to fill in section/paragraph #, if necessary.	
	Table 5 → <i>must be Table 2</i> Item “Throughput Calculation Method” Description is “How is throughput determined?” Should this be a question? The Description should describe the Throughput Calculation Method. Proposal for Description “Document methodology for equipment throughput” or “How throughput is determined”	
<b>Action</b>	The TC Chapter agreed to do one of the following actions.	
	*No motion is required in this step.	
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #
	<input type="checkbox"/>	No further action was taken by the TC Chapter.
	<input type="checkbox"/>	Refer to the TF for more consideration.
	<input type="checkbox"/>	New Business
	<input checked="" type="checkbox"/>	Editorial Change
<b>Editorial Changes</b>	Options for editorial change (check one)	<input checked="" type="checkbox"/> <b>Case 1: No vote in this section:</b> <b>To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.</b>
		<input type="checkbox"/> <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>Editorial Changes</b>	1	FROM: Section/Paragraph <b>xxx</b>
		TO: Section/Paragraph <b>xxx</b>
		Justification (If necessary)
	2	FROM: Section/Paragraph <b>xxx</b>
		TO: Section/Paragraph <b>xxx</b>
		Justification (If necessary)
<b>Motion</b>		To approve above editorial change(s)
<b>Motion by/2<sup>nd</sup> by</b>		Name (Company)/Name (Company)
<b>Discussion</b>		XXXX
<b>Vote</b>		XX Y-XX N; Motion passed/failed.

**Comment 9 AMAT-53**

*TF/TC Chapter to fill in section/paragraph #, if necessary.	
--	--

men	12.3 These suggested items while commendable would not be captured in an S23 analysis unless custom ECF are used. Should a note be added?	
	<b>The TC Chapter agreed to do one of the following actions.</b> <b>*No motion is required in this step.</b>	
Action	<input type="checkbox"/>	Already addressed by Commenter #, Comment #
	X	No further action was taken by the TC Chapter.
	<input type="checkbox"/>	Refer to the TF for more consideration.
	<input type="checkbox"/>	New Business
	<input type="checkbox"/>	Editorial Change
		Options for editorial change (check one)
Editorial Changes	1	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)
	2	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)
Motion		To approve above editorial change(s)
Motion by/2 <sup>nd</sup> by		Name (Company)/Name (Company)
Discussion		XXXX
Vote		XX Y-XX N; Motion passed/failed.

**Comment 10 AMAT-54**

Comment	<b>*TF/TC Chapter to fill in section/paragraph #, if necessary.</b>	
	12.5 Delete "strongly", an editorial comment. If the TF feels "strongly" that tool suppliers should perform this comparison then it should add this language otherwise it is editorial in nature Proposed It is recommended to provide use rate information when energy efficiency comparison is performed by using the methods of § 12.3 and §12.4	
Action	<b>The TC Chapter agreed to do one of the following actions.</b>	
	<b>*No motion is required in this step.</b>	

		Already addressed by Commenter #, Comment #
	X	No further action was taken by the TC Chapter.
		Refer to the TF for more consideration.
		New Business
		Editorial Change
	Options for editorial change (check one)	<b>Case 1: No vote in this section:</b> <b>To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.</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>
Editorial Changes	1	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)
	2	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)
Motion	To approve above editorial change(s)	
Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
Discussion	XXXX	
Vote	XX Y-XX N; Motion passed/failed.	

**Comment 11 AMAT-55**

Comment	<b>*TF/TC Chapter to fill in section/paragraph #, if necessary.</b>	
	12.11 Revise Bullet "Increase cooling water heat exchanger mean temperature difference" Proposed Increase cooling water system COP	
Action	<b>The TC Chapter agreed to do one of the following actions.</b>	
	<b>*No motion is required in this step.</b>	
		Already addressed by Commenter #, Comment #
	X	No further action was taken by the TC Chapter.
		Refer to the TF for more consideration.
		New Business
	Editorial Change	

	Options for editorial change (check one)		<b>Case 1: No vote in this section:</b>
			To be included and voted on as a group in § VI. <i>Editorial Changes Other than Those Voted on in § V.</i>
			<b>Case 2: Voted in this section:</b>
			Original section number and at least one full sentence are required in “FROM” and “TO” fields.
Editorial Changes	1	FROM: Section/Paragraph xxx	
		TO: Section/Paragraph xxx	
		Justification (If necessary)	
	2	FROM: Section/Paragraph xxx	
		TO: Section/Paragraph xxx	
		Justification (If necessary)	
Motion	To approve above editorial change(s)		
Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)		
Discussion	XXXX		
Vote	XX Y-XX N; Motion passed/failed.		

**Comment 12 AMAT-56**

Comment	<b>*TF/TC Chapter to fill in section/paragraph #, if necessary.</b>		
	R1-2.3.5 Revise (underline is new). Development of an alternate exhaust <u>energy</u> conversion factor should consider, among other factors at least:		
Action	<b>The TC Chapter agreed to do one of the following actions.</b>		
	<b>*No motion is required in this step.</b>		
		Already addressed by Commenter #, Comment #	
		No further action was taken by the TC Chapter.	
		Refer to the TF for more consideration.	
		New Business	
	X	Editorial Change	
	Options for editorial change (check one)	X	<b>Case 1: No vote in this section:</b>
			To be included and voted on as a group in § VI. <i>Editorial Changes Other than Those Voted on in § V.</i>
			<b>Case 2: Voted in this section:</b>
			Original section number and at least one full sentence are required in “FROM” and “TO” fields.

Editorial Changes	1	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)
	2	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)
Motion	To approve above editorial change(s)	
Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
Discussion	XXXX	
Vote	XX Y-XX N; Motion passed/failed.	

**Comment 13 AMAT-57**

Comment	<b>*TF/TC Chapter to fill in section/paragraph #, if necessary.</b>	
	R1-2.2.3 Examples given should hold constant tool heat load or cooling water flow if the intent is to compare the difference between two SME configurations.	
ACTION	<b>The TC Chapter agreed to do one of the following actions.</b>	
	<b>*No motion is required in this step.</b>	
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #
	<input checked="" type="checkbox"/>	No further action was taken by the TC Chapter.
	<input type="checkbox"/>	Refer to the TF for more consideration.
	<input type="checkbox"/>	New Business
	<input type="checkbox"/>	Editorial Change
Options for editorial change (check one)	<input type="checkbox"/>	<b>Case 1: No vote in this section:</b> <b>To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.</b>
	<input type="checkbox"/>	<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>
	<input type="checkbox"/>	
Editorial Changes	1	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx

		Justification (If necessary)
	2	FROM: Section/Paragraph xxx
		TO: Section/Paragraph xxx
		Justification (If necessary)
Motion	To approve above editorial change(s)	
Motion by/2 <sup>nd</sup> by	Name (Company)/Name (Company)	
Discussion	XXXX	
Vote	XX Y-XX N; Motion passed/failed.	

Commenter 3 (Name/Company) - Comment 1

### V-(ii) Comments Created by Handling Negative

Comment (Created by Handling Negative) NC – 1

Comment	*TF/TC Chapter to fill in			
	Comment created from AMAT-12, Note 16			
	Editorial change is suggested to the NOTE to add an explanatory text			
Action	The TC Chapter agreed to do one of the following actions.			
	*No motion is required in this step.			
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #		
	<input type="checkbox"/>	No further action was taken by the TC Chapter.		
	<input type="checkbox"/>	Refer to the TF for more consideration.		
	<input type="checkbox"/>	New business		
	X	Editorial change		
	Options for editorial change (check one)		Case 1: No vote in this section: To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.	
		X	Case 2: Voted in this section: Original section number and at least one full sentence are required in "FROM" and "TO" fields.	
	Cha	1	FROM: Section/Paragraph NOTE 16	
			NOTE 16: It is assumed that energy use during the transition between the idle and process modes is not significant.	

	TO: Section/Paragraph <b>NOTE 16</b> NOTE 16: It is assumed that energy use during the transition between the idle and process modes is not significant <u>because the transition time is short (by definition, less than 15 seconds).</u>
	Justification (If necessary)
	FROM: Section/Paragraph <b>xxx</b>
	TO: Section/Paragraph <b>xxx</b>
2	Justification (If necessary)
Motion	To approve above editorial change(s)
Motion by/2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)
Discussion	XXXX
Vote	7 Y-0 N; Motion passed

**Comment (Created by Handling Negative) NC – 2**

Comment	*TF/TC Chapter to fill in	
	Comment created from AMAT-13, ¶8.4.3	
	Editorial change is suggested for clarification	
Action	The TC Chapter agreed to do one of the following actions.	
	*No motion is required in this step.	
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #
	<input type="checkbox"/>	No further action was taken by the TC Chapter.
	<input type="checkbox"/>	Refer to the TF for more consideration.
	<input type="checkbox"/>	New business
<input checked="" type="checkbox"/>	Editorial change	
Options for editorial change (check one)	X	Case 1: No vote in this section: To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.
		Case 2: Voted in this section: Original section number and at least one full sentence are required in “FROM” and “TO” fields.



<b>Editorial Changes</b>	<b>1</b>	<b>FROM: Section/Paragraph ¶8.4.3</b> For rest and sleep modes, the average value of each parameter 1) during transition period from the idle mode to reach the stable lower equivalent energy use rate condition, 2) during the stable lower equivalent energy use rate condition period, and 3) during transition period from the stable lower equivalent energy use rate condition to the idle mode, should be measured separately for at least three times in each period.
		<b>TO: Section/Paragraph ¶8.4.3</b> For rest and sleep modes, at least three separate measurements should be taken of each parameter in each of the following periods; 1) during transition period from the idle mode to reach the stable lower equivalent energy use rate condition, 2) during the stable lower equivalent energy use rate condition period, and 3) during transition period from the stable lower equivalent energy use rate condition to the idle mode. Those values should be averaged for each parameter for each period.
		<b>Justification (If necessary)</b>
	<b>2</b>	<b>FROM: Section/Paragraph xxx</b>
		<b>TO: Section/Paragraph xxx</b>
		<b>Justification (If necessary)</b>
<b>Motion</b>	To approve above editorial change(s)	
<b>Motion by/2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)	
<b>Discussion</b>	XXXX	
<b>Vote</b>	6 Y-0 N; Motion passed	

**Comment (Created by Handling Negative) NC – 3**

<b>Comment</b>	<b>*TF/TC Chapter to fill in</b>	
	Comment created from AMAT-21, Table 3	
	Editorial change is suggested for for better consistency within the Table:	
<b>Action</b>	The TC Chapter agreed to do one of the following actions.	
	<b>*No motion is required in this step.</b>	
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #
	<input type="checkbox"/>	No further action was taken by the TC Chapter.
	<input type="checkbox"/>	Refer to the TF for more consideration.
	<input type="checkbox"/>	New business
<input checked="" type="checkbox"/>	Editorial change	
	<b>Options</b>	<b>Case 1: No vote in this section:</b>

	for editorial change (check one)		To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.
		X	Case 2: Voted in this section: Original section number and at least one full sentence are required in "FROM" and "TO" fields.
Editorial Changes	1	FROM: Section/Paragraph Table 3 the "Energy Conversion Factor" column in "Water Cooled by Refrigeration" row. Equivalent Energy/Volume	
		TO: Section/Paragraph Table 3 the "Energy Conversion Factor" column in "Water Cooled by Refrigeration" row. Energy/Volume	
		Justification (If necessary)	
	2	FROM: Section/Paragraph xxx	
		TO: Section/Paragraph xxx	
		Justification (If necessary)	
Motion		To approve above editorial change(s)	
Motion by/2 <sup>nd</sup> by		George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)	
Discussion		XXXX	
Vote		7 Y-0 N; Motion passed.	

**Comment (Created by Handling Negative) NC – 4**

Comment	*TF/TC Chapter to fill in		
	Comment created from AMAT-31, R1-2.1.3		
	Editorial change is suggested to mend a broken former reference		
Action	The TC Chapter agreed to do one of the following actions.		
	*No motion is required in this step.		
		Already addressed by Commenter #, Comment #	
		No further action was taken by the TC Chapter.	
		Refer to the TF for more consideration.	
		New business	
	X	Editorial change	
	Options for editorial change		Case 1: No vote in this section: To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.
		X	Case 2: Voted in this section:

		(check one) <input type="checkbox"/>	Original section number and at least one full sentence are required in "FROM" and "TO" fields.
Editorial Changes	1	FROM: Section/Paragraph R1-2.1.3 The heat load calculation follows a model that is different than the other items. It is shown in Table R1-3.	
		TO: Section/Paragraph R1-2.1.3 The heat load calculation follows a model that is different than the other items. It is shown in §R1-4.	
		Justification (If necessary)	
	2	FROM: Section/Paragraph xxx	
		TO: Section/Paragraph xxx	
		Justification (If necessary)	
Motion		To approve above editorial change(s)	
Motion by/2 <sup>nd</sup> by		George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)	
Discussion		XXXX	
Vote		7 Y-0 N; Motion passed	

**Comment (Created by Handling Negative) NC – 5**

Comment	*TF/TC Chapter to fill in		
	Comment created from AMAT-32, Table R1-1		
	Editorial change is suggested to correct order of the number		
Action	The TC Chapter agreed to do one of the following actions.		
	*No motion is required in this step.		
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #	
	<input type="checkbox"/>	No further action was taken by the TC Chapter.	
	<input type="checkbox"/>	Refer to the TF for more consideration.	
	<input type="checkbox"/>	New business	
	X	Editorial change	
Options for editorial change (check one)	<input type="checkbox"/>	Case 1: No vote in this section: To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.	
	<input type="checkbox"/>	Case 2: Voted in this section:	
	X	Original section number and at least one full sentence are required in "FROM" and "TO" fields.	
	<input type="checkbox"/>		

Editorial Changes	1	FROM: Section/Paragraph Table R1-1 “Basis of Conversion Factor” column in UPW/DIW row 1.96 × 10 <sup>3</sup> Pa (28.4 psi; 2 kg/cm <sup>2</sup> )
		TO: Section/Paragraph Table R1-1 “Basis of Conversion Factor” column in UPW/DIW row 0.2 MPa (2kgf/cm <sup>2</sup> )
		Justification (If necessary)
	2	FROM: Section/Paragraph Table R1-1 “Basis of Conversion Factor” column in N2 row 793Pa
		TO: Section/Paragraph Table R1-1 “Basis of Conversion Factor” column in N2 row 793 kPa
		Justification (If necessary)
Motion	To approve above editorial change(s)	
Motion by/2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)	
Discussion	XXXX	
Vote	7 Y-0 N; Motion passed	

**Comment (Created by Handling Negative) NC – 6**

Comment	*TF/TC Chapter to fill in	
	Comment created from AMAT-34, R1-2.2.3	
	Editorial change is suggested for clarify the intent of the paragraph	
Action	The TC Chapter agreed to do one of the following actions.	
	*No motion is required in this step.	
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #
	<input type="checkbox"/>	No further action was taken by the TC Chapter.
	<input type="checkbox"/>	Refer to the TF for more consideration.
	<input type="checkbox"/>	New business
	<input checked="" type="checkbox"/>	Editorial change
Options for editorial change (check one)	<input type="checkbox"/>	Case 1: No vote in this section: To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.
	<input checked="" type="checkbox"/>	Case 2: Voted in this section: Original section number and at least one full sentence are required in “FROM” and “TO” fields.

Editorial Changes	1	<b>FROM: Section/Paragraph R1-2.2.3.1</b> Cooling COP = Coefficient of Performance for the facility water refrigeration system (e.g. chiller and cooling tower). The value is 4.50 for S23, independent of temperature.
		<b>TO: Section/Paragraph R1-2.2.3.1</b> Cooling COP = Coefficient of Performance for the facility water refrigeration system (e.g. chiller and cooling tower). The value used for this ECF is 4.50, independent of temperature.
		<b>Justification (If necessary)</b>
	2	<b>FROM: Section/Paragraph</b>
		<b>TO: Section/Paragraph</b>
		<b>Justification (If necessary)</b>
<b>Motion</b>		To approve above editorial change(s)
<b>Motion by/2<sup>nd</sup> by</b>		George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)
<b>Discussion</b>		XXXX
<b>Vote</b>		7 Y-0 N; Motion passed.

**Comment (Created by Handling Negative) NC – 7**

Comment	<b>*TF/TC Chapter to fill in</b>	
	<b>Comment created from AMAT-40, R1-2.6.4</b>	
	<b>Editorial change is suggested to address incorrect use of terminology</b>	
Action	<b>The TC Chapter agreed to do one of the following actions.</b>	
	<b>*No motion is required in this step.</b>	
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #
	<input type="checkbox"/>	No further action was taken by the TC Chapter.
	<input type="checkbox"/>	Refer to the TF for more consideration.
	<input type="checkbox"/>	New business
<input checked="" type="checkbox"/>	Editorial change	
Options for editorial change (check one)	<input type="checkbox"/>	<b>Case 1: No vote in this section:</b> <b>To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.</b>
	<input checked="" type="checkbox"/>	<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>
	<input type="checkbox"/>	

<b>Editorial Changes</b>	<b>1</b>	<b>FROM: Section/Paragraph R1-2.6.4</b> The heat load calculation is taken in four steps. First estimate the electrical energy delivered to the SME per year. Next estimate the energy removed per year by exhausted air using the volume of air removed, the input-output air temperature difference, and the <b>heat capacity</b> and density of air. Then estimate the energy removed per year by cooling water in a similar manner, using the <b>heat capacity</b> and density of water. Finally subtract the last two energy values from the first to get the heat load of the equipment that is transferred to the room in which the SME resides.
		<b>TO: Section/Paragraph R1-2.6.4</b> The heat load calculation is taken in four steps. First estimate the electrical energy delivered to the SME per year. Next estimate the energy removed per year by exhausted air using the volume of air removed, the input-output air temperature difference, and the <b>specific heat</b> and density of air. Then estimate the energy removed per year by cooling water in a similar manner, using the <b>specific heat</b> and density of water. Finally subtract the last two energy values from the first to get the heat load of the equipment that is transferred to the room in which the SME resides.
		<b>Justification (If necessary)</b>
	<b>2</b>	<b>FROM: Section/Paragraph</b>
		<b>TO: Section/Paragraph</b>
		<b>Justification (If necessary)</b>
<b>Motion</b>	To approve above editorial change(s)	
<b>Motion by/2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)	
<b>Discussion</b>	XXXX	
<b>Vote</b>	7 Y-0 N; Motion passed	

**Comment (Created by Handling Negative) NC – 8**

<b>Comment</b>	<b>*TF/TC Chapter to fill in</b>	
	<b>Comment created from AMAT-41, R1-2.6.5</b>	
	<b>Editorial change is suggested for consistent use of term</b>	
<b>Action</b>	<b>The TC Chapter agreed to do one of the following actions.</b>	
	<b>*No motion is required in this step.</b>	
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #
	<input type="checkbox"/>	No further action was taken by the TC Chapter.
	<input type="checkbox"/>	Refer to the TF for more consideration.
	<input type="checkbox"/>	New business
<input checked="" type="checkbox"/>	Editorial change	

	Options for editorial change (check one)		<b>Case 1: No vote in this section:</b>
			<b>To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.</b>
		X	<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>
Editorial Changes	1		<b>FROM: Section/Paragraph R1-2.6.5</b> Once the room heat load of the SME has been estimated, the "Heat Load Burden" conversion factor can be used to express the energy required to remove that heat from the SME environment.
			<b>TO: Section/Paragraph R1-2.6.5</b> Once the room heat load of the SME has been estimated, the "Air Conditioning (heat load, cooling load)" conversion factor can be used to express the energy required to remove that heat from the SME environment.
			<b>Justification (If necessary)</b>
	2		<b>FROM: Section/Paragraph</b>
			<b>TO: Section/Paragraph</b>
			<b>Justification (If necessary)</b>
<b>Motion</b>		To approve above editorial change(s)	
<b>Motion by/2<sup>nd</sup> by</b>		George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)	
<b>Discussion</b>		XXXX	
<b>Vote</b>		7 Y-0 N; Motion passed	

**Comment (Created by Handling Negative) NC – 9**

Comment		<b>*TF/TC Chapter to fill in</b>
		<b>Comment created from AMAT-42, R1-3</b>
		<b>Editorial change is suggested to update formulas to match new ECF introduce in section 9</b>
Action		<b>The TC Chapter agreed to do one of the following actions.</b>
		<b>*No motion is required in this step.</b>
		Already addressed by Commenter #, Comment #
		No further action was taken by the TC Chapter.
		Refer to the TF for more consideration.
	X	Editorial change

	Options for editorial change (check one)	X	<b>Case 1: No vote in this section:</b>
			<b>To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.</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>
Editorial Changes	1		<b>FROM: Section/Paragraph R1-3.1</b> Estimated annual energy equivalent: $698 \text{ m}^3 \times 5.62 \times 10^3 \text{ kJ/m}^3 (1.56 \text{ kWh/m}^3) = 3.92 \times 10^6 \text{ kJ} (1.09 \times 10^3 \text{ kWh})$ {ECF = $(0.258 \times \Delta T + 0.273) \times 3.6 \times 10^3 \text{ kJ/m}^3 [(0.258 \times \Delta T + 0.273) \text{ kWh/m}^3 ] = 5.62 \times 10^3 \text{ kJ m}^3 (1.56 \text{ kWh/m}^3)$ }
			<b>TO: Section/Paragraph R1-3.1</b> Estimated annual energy equivalent = annual amount used * ECF = $[929 (\text{kJ/m}^3\text{K}) \times \Delta T + 983 (\text{kJ/m}^3)] * 698 \text{ m}^3$ = $[929 (\text{kJ/m}^3\text{K}) \times 5 \text{ K} + 983 (\text{kJ/m}^3)] * 698 \text{ m}^3$ = $5.63 \times 10^3 \text{ kJ /m}^3$
			<b>Justification (If necessary)</b>
	2		<b>FROM: Section/Paragraph</b>
			<b>TO: Section/Paragraph</b>
			<b>Justification (If necessary)</b>
Motion	To approve above editorial change(s)		
Motion by/2 <sup>nd</sup> by	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)		
Discussion	XXXX		
Vote	7 Y-0 N; Motion passed		

**Comment (Created by Handling Negative) NC – 10**

Comment	<b>*TF/TC Chapter to fill in</b>
	<b>Comment created from AMAT-44, Note36</b>
	<b>Editorial change is suggested to delete unnecessary Note</b>
Action	<b>The TC Chapter agreed to do one of the following actions.</b>
	<b>*No motion is required in this step.</b>
	Already addressed by Commenter #, Comment #
	No further action was taken by the TC Chapter.
	Refer to the TF for more consideration.
	New business



	X	Editorial change	
Editorial Changes	Options for editorial change (check one)		Case 1: No vote in this section: To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.
		X	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/Paragraph <b>Note36 after R1-2.7.3</b> NOTE 36: For example, the energy content of coal is approximately $2.88 \times 10^7$ kJ (8000 kWh) per ton. If the electricity provider must burn one ton of coal to generate $2.16 \times 10^7$ kJ (6000 kWh) of electrical energy, the electrical energy conversion factor could be set to 1.33 (no units) to express the actual energy required to produce $3.60 \times 10^3$ kJ (1 kWh) of electrical energy.	
		TO: Section/Paragraph <b>Deletion of Note36 after R1-2.7.3</b> NOTE 36: For example, the energy content of coal is approximately $2.88 \times 10^7$ kJ (8000 kWh) per ton. If the electricity provider must burn one ton of coal to generate $2.16 \times 10^7$ kJ (6000 kWh) of electrical energy, the electrical energy conversion factor could be set to 1.33 (no units) to express the actual energy required to produce $3.60 \times 10^3$ kJ (1 kWh) of electrical energy.	
	Justification (If necessary)		
2	FROM: Section/Paragraph		
	TO: Section/Paragraph		
	Justification (If necessary)		
Motion		To approve above editorial change(s)	
Motion by/2 <sup>nd</sup> by		George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)	
Discussion		XXXX	
Vote		6 Y-0 N; Motion passed	

Comment (Created by Handling Negative) NC – 11

## VI. Editorial Changes Other than Those Voted on in § V

Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.

1	Origin of this editorial change (Check one)		Commenter(s) / Comment(s) #
		X	Other [created during discussion on AMAT Negative 39]
FROM: Section/Paragraph <b>R1-2.5.2</b> R1-2.5.2 A very rough analysis based on data from other industries, indicates, for example, that simple chemicals such as K2O or ethanol have energy equivalents much greater than $3.60 \times 10^6$ kJ/m <sup>3</sup> (1000 kWh/m <sup>3</sup> ).			

	<b>TO: Section/Paragraph R1-2.5.2</b> R1-2.5.2 A very rough analysis based on data from other industries, indicates, for example, that simple chemicals such as K2O or ethanol have energy equivalents much greater than $3.60 \times 10^6$ kJ/m <sup>3</sup> (1000 kWh/m <sup>3</sup> ).	
	<b>Justification: (If necessary)</b>	
2	Origin of this editorial change (Check one)	<input checked="" type="checkbox"/> Commenter(s) / Comment(s) #AMAT-47
		<input type="checkbox"/> Other [ ]
	<b>FROM: Section/Paragraph 6.4</b> The SME suppliers should investigate use rate of each utility and material in –their SME and identify and implement design or process changes that lessen the energy impact of the SME.	
	<b>TO: Section/Paragraph 6.4</b> The SME suppliers should investigate use rate of each utility and material in their SME and identify and implement design or process changes that lessen the energy impact of the SME.	
	<b>Justification: (If necessary)</b>	
3	Origin of this editorial change (Check one)	<input checked="" type="checkbox"/> Commenter(s) / Comment(s) # AMAT-51
		<input type="checkbox"/> Other []
	<b>FROM: Section/Paragraph Table3</b> Vacuum 216kJ/m <sup>3</sup> (0.060 kWh/m <sup>3</sup> ) Clean Dry Air 529kJ/m <sup>3</sup> (0.147 kWh/m <sup>3</sup> ) High Pressure Clean Dry Air 630kJ/m <sup>3</sup> (0.175 kWh/m <sup>3</sup> )	
	<b>TO: Section/Paragraph Table 3</b> Vacuum 216 kJ/m <sup>3</sup> (0.060 kWh/m <sup>3</sup> ) Clean Dry Air 529 kJ/m <sup>3</sup> (0.147 kWh/m <sup>3</sup> ) High Pressure Clean Dry Air 630 kJ/m <sup>3</sup> (0.175 kWh/m <sup>3</sup> )	
	<b>Justification: (If necessary)</b>	
4	Origin of this editorial change (Check one)	<input checked="" type="checkbox"/> Commenter(s) / Comment(s) #AMAT-52
		<input type="checkbox"/> Other [ ]
	<b>FROM: Section/Paragraph Table 2</b> Throughput Calculation Method      How is throughput determined?	
	<b>TO: Section/Paragraph Table2</b> Throughput Calculation Method      How throughput is determined.	
	<b>Justification: (If necessary)</b>	
5	Origin of this editorial change (Check one)	<input type="checkbox"/> Commenter(s) / Comment(s)
		<input checked="" type="checkbox"/> Other [ typo discovered by participants during TC Chapter Review ]
	<b>FROM: Section/Paragraph 5.2.11</b> <i>performance factor</i> — a quantification of SME functional performance metrics that is not directly measured as quantity outputs (e.g., minimum detectable particle size, smallest pattern pitch that can be processed) for a given SME model relative to some other model of a similar type.	

	<b>TO: Section/Paragraph 5.2.11</b> <i>performance factor</i> — a quantification of SME functional performance metrics that is not directly measured as quantity outputs (e.g., minimum detectable particle size, smallest pattern pitch that can be processed) for a given SME model relative to some other model of a similar type.	
	<b>Justification: (if necessary)</b>	
6	Origin of this editorial change (Check one)	<input checked="" type="checkbox"/> Commenter(s) / Comment(s) AMAT-56
	<b>FROM: Section/Paragraph R1-2.3.5</b> Development of an alternate exhaust conversion factor should consider, among other factors at least:	
	<b>TO: Section/Paragraph R1-2.3.5</b> Development of an alternate exhaust <b>energy</b> conversion factor should consider, among other factors at least:	
	<b>Justification: (if necessary)</b>	
7	Origin of this editorial change (Check one)	<input type="checkbox"/> Commenter(s) / Comment(s)
		<input checked="" type="checkbox"/> Other [typo discovered by participants during TC Chapter Review]
	<b>FROM: Section/Paragraph ¶¶1.1, 1.3 and 1.5</b> 1.1 This Guide addresses concepts related to energy, utilities and materials use efficiency of semiconductor manufacturing equipment (SME). 1.3 This Guide also addresses measurements related to energy, utilities and materials use in SME. 1.5 This Guide is a series of options and instructions intended to increase awareness of the reader to available techniques in the area of energy, utilities and materials use efficiency.	
	<b>TO: Section/Paragraph ¶¶1.1, 1.3 and 1.5</b> 1.1 This Guide addresses concepts related to energy, utilities, and materials use efficiency of semiconductor manufacturing equipment (SME). 1.3 This Guide also addresses measurements related to energy, utilities, and materials use in SME. 1.5 This Guide is a series of options and instructions intended to increase awareness of the reader to available techniques in the area of energy, utilities, and materials use efficiency.	
	<b>Justification: (if necessary)</b>	
8	Origin of this editorial change (Check one)	<input type="checkbox"/> Commenter(s) / Comment(s)
		<input checked="" type="checkbox"/> Other [typo discovered by participants during TC Chapter Review]
	<b>FROM: Section/Paragraph R1-4.1.2</b> Heat Load is calculated as below $3.28 \times 10^8 \text{ kJ} (9.11 \times 10^4 \text{ kWh}) - 6.52 \times 10^7 \text{ kJ} (1.81 \times 10^4 \text{ kWh}) - 1.10 \times 10^6 \text{ kJ} (3.04 \times 10^2 \text{ kWh}) = 2.61 \times 10^8 \text{ kJ} (7.27 \times 10^4 \text{ kWh})$	
	Energy for Cooling is calculated as below $2.61 \times 10^8 \text{ kJ} (7.27 \times 10^4 \text{ kWh}) \times 0.287 \text{ kJ/kJ (kWh/kWh)} = 7.49 \times 10^7 \text{ kJ} (2.09 \times 10^4 \text{ kWh})$	
	<b>TO: Section/Paragraph R1-4.1.2</b> Heat Load is calculated as below $3.28 \times 10^8 \text{ kJ} (9.11 \times 10^4 \text{ kWh}) - 6.52 \times 10^7 \text{ kJ} (1.81 \times 10^4 \text{ kWh}) - 1.10 \times 10^6 \text{ kJ} (3.04 \times 10^2 \text{ kWh}) = 2.61 \times 10^8 \text{ kJ} (7.27 \times 10^4 \text{ kWh})$  Energy for Cooling is calculated as below $2.61 \times 10^8 \text{ kJ} (7.27 \times 10^4 \text{ kWh}) \times 0.287 \text{ kJ/kJ (kWh/kWh)} = 7.49 \times 10^7 \text{ kJ} (2.09 \times 10^4 \text{ kWh})$	
	<b>Justification: (if necessary)</b>	

9	Origin of this editorial change <b>(Check one)</b>	<input type="checkbox"/>	Commenter(s) / Comment(s)
		<input checked="" type="checkbox"/>	Other [ Editorial change originated from AMAT Negative 23]
	FROM: Section/Paragraph <b>Table 3 N<sub>2</sub></b> 9.00 x 10 <sup>2</sup> kJ/m <sup>3</sup>		
	TO: Section/Paragraph <b>Table 3 N<sub>2</sub></b> 900 kJ/m <sup>3</sup>		
Justification: <b>(If necessary)</b>			
<b>Motion</b>		To approve the above editorial change(s).	
<b>Motion by/ 2<sup>nd</sup> by</b>		George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)	
<b>Discussion</b>		XXXX	
<b>Vote</b>		7Y-0 N; Motion <b>passed</b>	

## VII. Approval Conditions Check

### VII. - (i). Approval Rate

**APPROVAL CONDITION 1:** All Negatives have been discussed and were withdrawn, found not related, found not persuasive, or addressed by a technical change. (*Regulations ¶ 9.7.1.2*)

**APPROVAL CONDITION 2:** At least 90% of the sum of valid Voting Interest Accept and Voting Interest Reject Votes must be Accept. (*Regulations ¶ 9.7.1.3*)

**Note:** If both approval conditions are not satisfied, the Document fails.

		Accepts		(Accepts + Valid Rejects)			
Approval Rate	=	42	/	42	=	100.0%	≥90%

### VII. – (ii) Approval Level **(check one)**

**Note:** See *Regulations § 9.7.2* for further information.

**Globally Approved (No Ratification Ballot needed):**  
The Letter Ballot meets the Letter Ballot approval conditions for the global technical committee.

**x**

**Need a Ratification Ballot:**

The Letter Ballot meets the Letter Ballot approval conditions for the TC Chapter and a Ratification Ballot will be issued to validate technical changes.

**VIII. Safety Check**

Note: See Regulations § 15 for further information.

<b>Motion</b>	<b>x</b>	<b>This is not a Safety Document</b> , when all safety-related information is removed, the Document is still technically sound and complete. ( <i>Regulations ¶ 8.7.1</i> )
		<b>This is a Safety Document</b> , when all safety-related information is removed, the Document is not technically sound and complete. ( <i>Regulations ¶ 8.7.2</i> )
		Safety Checklist ( <i>Regulations ¶ 15.3</i> ) is complete and has been included with the Document throughout the balloting process. ( <i>Regulations ¶ 15.1.2</i> )
<b>Motion by/2<sup>nd</sup> by</b>		George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)
<b>Discussion</b>		XXXX
<b>Vote</b>		7 Y-0 N; Motion passed

**IX. Intellectual Property (IP) Check**

Note: This Letter Ballot may cover all or part of a Standard or Safety Guideline. This IP check applies to the entire Standard or Safety Guideline. See Regulations § 16 for further information.

<b>x</b>	The TC Chapter meeting chair asked those participating, if they were aware of any potentially material patented technology or copyrighted items* in the Standard or Guideline. ( <i>Regulations ¶ 8.8.1</i> )	
	No potentially material patented technology or reproduction of copyrighted items is known.	<b>GO TO SECTION X.</b>
<b>x</b>	Potentially material patented technology or reproduction of copyrighted items is known, but a Letter of Assurance (LOA) or copyright release letter for such items has been obtained or presented to the TC Chapter.	<b>GO TO SECTION X.</b>
	Potentially material patented technology or reproduction of copyrighted items is known and use of such materials is technically justified by the TC Chapter, but an LOA or copyright release letter for some of the item(s) has NOT been obtained or presented to the TC Chapter.	
<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 Y-XX N
<b>Final Action</b>		Motion passed
		Motion failed

\* 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 Letter Ballot.

## X. Action for This Document

<b>Motion</b>	<input type="checkbox"/>	This Document passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.
	<input type="checkbox"/>	This Document passed TC Chapter review with editorial changes and will be forwarded to the ISC A&R SC for procedural review.
	<input checked="" type="checkbox"/>	This Document passed TC Chapter review with technical changes and with or without editorial changes and will be forwarded to the ISC A&R SC for procedural review. A Ratification Ballot will be issued to verify the technical changes.
	<input type="checkbox"/>	This Document failed TC Chapter review and will be returned to the TF for rework.
	<input type="checkbox"/>	This Document failed TC Chapter review and work will be discontinued.
<b>Motion by/ 2<sup>nd</sup> by</b>	George Hoshi (Tokyo Electron)/Moray Crawford (Hatsuta)	
<b>Discussion</b>	XXXX	
<b>Vote</b>	7 Y-0 N	
<b>Final Action</b>	<input checked="" type="checkbox"/>	Motion passed
	<input type="checkbox"/>	Motion failed

Standards staff to record the result of the A&R procedural review here:

<b>A&amp;R</b>	<input type="checkbox"/>	Approved for publication
	<input type="checkbox"/>	Approved pending acceptance of the Ratification Ballot
	<input type="checkbox"/>	Not approved
	<b>Reason:</b>	