

# Record of Line-item Letter Ballot Review by TC Chapter for Procedural Review

Region/Locale: **North America**

Global Technical Committee: **Metrics**

TC Chapter Cochairs: **David Bouldin (Fab Consulting), Mark Frankfurth (Cymer/ASML), Vladimir Kraz (BestESD)**

Standards Staff: **Michelle Sun**

	Scheduled in Background Statement	Actual
Date	<b>03/28/2024</b>	<b>03/28/2024</b>
Location	<b>Hybrid, SEMI Headquarters</b>	<b>Hybrid, SEMI Headquarters</b>
Reason for Change of Date and/or Location (if changed)		

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

## Document Information

### I. Document Number, Title, Lists of Line Items

	<b>Document Number</b> 6894	<b>Document Title</b> LINE ITEM REVISION TO SEMI E33-0217E GUIDE FOR SEMICONDUCTOR MANUFACTURING EQUIPMENT ELECTROMAGNETIC COMPATIBILITY (EMC), AND E176-1017, GUIDE TO ASSESS AND MINIMIZE ELECTROMAGNETIC INTERFERENCE (EMI) IN A SEMICONDUCTOR MANUFACTURING ENVIRONMENT
List of Line Items	Line Item 1	<b>Line Item Title</b> Move Appendix 1 from SEMI E33 to E176
	Line Item 2	<b>Line Item Title</b> Update References and Other Editorial Changes

## Line Item 1 Adjudication

### 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* ¶ 9.6.2.1.1)

**Voting Tally (with example values):**

Voting Interest:	Returned Votes	Distribution	Return Rate	
Letter Ballot	32	÷ 51	= 62.7%	≥60%
Intercommittee Ballot	34			
Voting Interest Reject(s)	1	Total Voters with Rejects		1
Voting Interest Accept(s)	27			

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

### III. Rejects

#### Voting Interest Reject 1 (Voting Interest Name: Eric Sklar)

#### Voter Reject 1 (Voter: Eric Sklar / Safety Guru, LLC)

#### Negative 1

<b>Negative</b>	<b>Referenced Section/ Paragraph</b>	<b>*TF/TC Chapter to fill in, including text in the ballot if necessary.</b>			
		A1-2.5.2 Compare the ELF EMF strength level once the semiconductor manufacturing equipment is installed and in operation to the sensitivity to ELF EMFs of the adjacent equipment to determine if the equipment’s strength level is still compatible with the adjacent equipment’s ELF immunity limits.			
<b>Negative</b>	<b>Negative Text</b>	<b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b>			
		SG1-18: A1-2.5.2 <i>Negative:</i> Rewrite for clarity. <i>Reason/Justification:</i> It is the strength of the EMF, not the strength of the equipment, that is of interest. Furthermore, a field strength can be below an immunity limit, but not “compatible with” one.			
<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"/>	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 type="checkbox"/>	Negative is related and not persuasive. <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 checked="" 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 checked="" 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 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.						
	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).]				<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>	
Incorporation	<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.		
		<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 ¶ 9.6.1.4.5.2)			
	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)	
		<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 checked="" 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)	Comment generated. See Section V-(ii) Comment # X.			

## IV. Other Technical Issues

None

## V. Comments

None

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

None

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

None

## Line Item 2 Adjudication

### II. Tally

Voting Interest:	Returned Votes		Distribution		Return Rate	
Letter Ballot	32	÷	51	=	62.7%	≥60%
Intercommittee Ballot	34					
Voting Interest Reject(s)	1		Total Voters with Rejects		1	
Voting Interest Accept(s)	27					

Standards staff to fill in.

### III. Rejects

Voting Interest Reject 1 (Voting Interest Name: Eric Sklar)

Voter Reject 1 (Voter: Eric Sklar / Safety Guru, LLC)

#### Negative 1

Ⓟ Z		*TF/TC Chapter to fill in, including text in the ballot if necessary.
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	<p>R3-1.4 <i>International Electrotechnical Commission (IEC) Standards</i></p> <p>...</p> <p>EN 61204-3/IEC 61204-3 — Low Voltage Power Supplies, DC Output – Part 3: Electromagnetic Compatibility (EMC)</p> <p><del>EN 50091-2 — Uninterruptible Power Systems (UPS) – Part 2: EMC Requirements</del></p> <p><del>EN 62040-2 — Uninterruptible Power Systems (UPS) – Part 2: EMC Requirements</del></p> <p><del>EN 61326/IEC 61326 — Electrical Equipment for Measurement, Control and Laboratory Use – EMC Requirements</del></p> <p><del>EN 61326-3-1/IEC 61326-3-1 — Electrical Equipment for Measurement, Control and Laboratory Use – EMC Requirements</del></p> <p>IEC 62040-2 — Uninterruptible Power Systems (UPS) – Part 2: Electromagnetic Compatibility (EMC) Requirements</p>								
	<p><b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b></p> <p>SG2-1: E33 R3-1.4</p> <p>Negative: “EN 62040-2” is listed under “IEC Standards” but does not have an IEC designator. Either provide the IEC designator [or] move this to under an appropriate heading.</p> <p>Reason/Justification: Standard does not have a designator from the SDO under which it is listed.</p>								
	<p><b>TF input (optional)</b> Eric found an error, but it can be easily corrected by an editorial change.</p>								
	<table border="1"> <tr> <td><b>Withdrawal (check one)</b></td> <td><input checked="" type="checkbox"/></td> <td>No Negative withdrawal made by Voter.</td> <td>GO TO “Related” subsection</td> </tr> <tr> <td></td> <td><input type="checkbox"/></td> <td>Withdrawal document received by Standards staff on MM/DD/YYYY.</td> <td>GO TO “Final” subsection → (A)</td> </tr> </table>	<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>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		<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.							
		<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. (Needs >1/3 votes to pass.)						
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)						
			Reason	Can be fixed with editorial change.					
			Motion by/ 2 <sup>nd</sup> by By: Mark Frankfurth / ASML Netherlands BV Second: Supika Mashiro / Tokyo Electron Ltd.						
			Discussion None						
		7 Y-0 N; Motion passed							

Result of Vote (check one)	<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	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 ¶ 9.6.1.4.5.2)					
	<input type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant".				GO TO "Final" subsection → (D)

	<b>Use of “Not significant finding option” (check one)</b>	<input checked="" 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 checked="" 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 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 # 1.</b>		

## Negative 2

<b>Negative</b>	<b>Referenced Section/ Paragraph</b>	<p><b>*TF/TC Chapter to fill in, including text in the ballot if necessary.</b></p> <p><b>1 Purpose</b> 1.1 The purpose of this Guide is to provide guidance for the assessment and minimization of electromagnetic interference (EMI) in a semiconductor manufacturing environment to improve yield, equipment availability, and test results (e.g., testing time, measurement relevance, repeatability, and accuracy).</p> <p><b>2 Scope</b> 2.1 This Guide applies to equipment and facilities provided for the purpose of manufacturing semiconductor devices (i.e., equipment in a semiconductor manufacturing environment) not otherwise in the scope of SEMI E33, including all communications and control systems; processing, metrology, inspection, and automation equipment; and information-technology equipment. 2.2 The primary focus of this Guide is on a semiconductor manufacturing environment, but this Guide may also be applied to the facilities and equipment used for manufacturing other related products (e.g., photovoltaics (PVs), flat panel displays [FPDs], disk drives, microelectromechanical systems [MEMS]). 2.2.1 Some terms are specialized to a semiconductor manufacturing environment.</p> <p><b>NOTICE:</b> SEMI Standards and Safety Guidelines do not purport to address all safety issues associated with their use. It is the responsibility of the users of the Documents to establish appropriate safety and health practices, and determine the applicability of regulatory or other limitations prior to use.</p> <p><b>NOTE 19:</b> <u>NOTE 17:</u> Under certain conditions, EMI can impact equipment safety. ...</p>
	<b>Negative Text</b>	<b>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</b>



		<p>SG2-2: E176 NOTE 17, <i>et seq.</i>  <i>Negative:</i> Correct numbering.  <i>Reason/Justification:</i> It appears that the NOTEs numbers in E176 are shown as starting with the first integer after the last NOTE number in E33. This is most probably a ballot preparation error, but it does need to be fixed.</p>				
	<b>TF input (optional)</b>	<p>During ballot preparation, the NOTE numbering was accidentally changed to be continuing from the E33 revision draft that preceded it in the ballot instead of starting at NOTE 1 in the current version. This error was not caught during preballot release review. The numbering of all NOTEs needs to be corrected back to the original numbering.</p>				
	<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. (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		
	<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. (Needs >1/3 votes to pass.)			
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			
		<input type="checkbox"/>	Reason	Can be fixed with editorial change		
	<b>Motion by/ 2<sup>nd</sup> by</b>	By: Mark Frankfurth / ASML Netherlands BV Second: Supika Mashiro / Tokyo Electron Ltd.				
	<b>Discussion</b>	None				
	<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 <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 ¶ 9.6.1.4.5.2)			
		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)		

			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)	
		X	(C)	Related and not persuasive (significant)	
			(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 # 2.		

### Negative 3

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.		
		<p>5.2 Definitions</p> <p>11.1.1 <i>conducted emission</i> — electromagnetic signals present on wires, cables, metal parts and other conductors of equipment.</p> <p>11.1.2 <i>electrical overstress (EOS)</i> — exposure of a device or circuit to damaging electrical signals other than electrostatic discharge.</p> <p>...</p>		
	Negative Text	<p>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</p> <p>SG2-3: E176 ¶ 11.1.1., et seq  <i>Negative:</i> Correct numbering.  <i>Reason/Justification:</i> It appears that, starting with ¶ 11.1.1 the NOTES [Eric meant to say paragraph] numbers in E176 are shown as continuing from the last paragraph number in the body of E33. This is most probably a ballot preparation error, but it does need to be fixed.</p>		
	TF input (optional)	<p>During ballot preparation, the paragraph numbering was accidentally changed starting with 5.2.1 to be continuing from the E33 revision draft that preceded it in the ballot instead of continuing as 5.2.1 in the current version. This error was not caught during preballot release review. The numbering of all paragraphs needs to be corrected back to the original numbering.</p>		
	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			
		XX Y-XX N; Motion passed/failed.		

	<b>Result of Vote (check one)</b>	<input type="checkbox"/>	[Negative is not related.] < 2/3	<b>GO TO “Persuasive” subsection</b>	
	<b>Result of Vote (check one)</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	Can be fixed editorially	
	<b>Motion by/ 2<sup>nd</sup> by</b>	By: Mark Frankfurth / ASML Netherlands BV Second: Todor Ganev / KLA Corporation			
	<b>Discussion</b>	None			
	<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 <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.				
	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).]	<b>GO TO “Incorporation of the Technical Change” subsection</b>		

		[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 ¶ 9.6.1.4.5.2)		
	Use of “Not significant finding option” (check one)		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		XX Y-XX N; Motion passed with simple majority
		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 checked="" 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 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 # 3.

### Disposition of Voting Interest Reject 1

Check only when the Document has not been failed.

3	Original number (#) of Negatives	(g)
0	Number of Negatives withdrawn	(h)
0	Number of Negatives found not related	(i)
0	Number of Negatives found not significant	(j)
0	Number of Negatives addressed by technical change (Negative becomes not significant)	(k)
Final	<input type="checkbox"/>	$g - (h + i + j + k) = 0$ Reject is Not Valid and is not included in the denominator of § VI. Approval Conditions Check

	3	$g - (h + i + j + k) > 0$	Reject is included in the denominator of § VI. <i>Approval Conditions Check</i>
		Reject without a Negative	Not Valid

## IV. Other Technical Issues

## V. Comments

### V- (i) Voters' Comments

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

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

	Origin of this editorial change <b>(Check one)</b>		Committer(s) / Comment(s) #
		X	Other [Eric Sklar/Safety Guru Negative SG2-1]
1	<p>FROM: Section/Paragraph R3-1.4 R3-1.4 <i>International Electrotechnical Commission (IEC) Standards</i> ... EN 61204-3/IEC 61204-3 — Low Voltage Power Supplies, DC Output – Part 3: Electromagnetic Compatibility (EMC) <del>EN 50091-2 — Uninterruptible Power Systems (UPS) – Part 2: EMC Requirements</del> <del>EN 62040-2 — Uninterruptible Power Systems (UPS) – Part 2: EMC Requirements</del> <del>EN 61326/IEC 61326 — Electrical Equipment for Measurement, Control and Laboratory Use — EMC Requirements</del> <u>EN 61326-3-1/IEC 61326-3-1 — Electrical Equipment for Measurement, Control and Laboratory Use – EMC Requirements</u> IEC 62040-2 — Uninterruptible Power Systems (UPS) – Part 2: Electromagnetic Compatibility (EMC) Requirements</p>		
	<p>TO: Section/Paragraph R3-1.4 R3-1.4 <i>International Electrotechnical Commission (IEC) Standards</i> ... EN 61204-3/IEC 61204-3 — Low Voltage Power Supplies, DC Output – Part 3: Electromagnetic Compatibility (EMC) <del>EN 50091-2 — Uninterruptible Power Systems (UPS) – Part 2: EMC Requirements</del> <del>EN 62040-2 — Uninterruptible Power Systems (UPS) – Part 2: EMC Requirements</del> <del>EN 61326/IEC 61326 — Electrical Equipment for Measurement, Control and Laboratory Use — EMC Requirements</del> <u>EN 61326-3-1/IEC 61326-3-1 — Electrical Equipment for Measurement, Control and Laboratory Use – EMC Requirements</u> <u>EN 62040-2/IEC 62040-2 — Uninterruptible Power Systems (UPS) – Part 2: Electromagnetic Compatibility (EMC) Requirements</u> <b>Justification: (if necessary)</b> EN 50091-2 was deleted and replaced with EN 62040-2, but it is the same as IEC 62040-2 already included below so it is a duplication. Combine the two document numbers for the same document on the same line.</p>		
2	Origin of this editorial change <b>(Check one)</b>		Committer(s) / Comment(s) #
		X	Other [Eric Sklar/Safety Guru Negative SG2-2]

<p><b>FROM: Section/Paragraph NOTE 19 and remaining NOTES (misnumbered starting with NOTE 1]</b>  <del>NOTE 19:</del> <a href="#">NOTE 17</a>: Under certain conditions, EMI can impact equipment safety.  <del>NOTE 20:</del> <a href="#">NOTE 18</a>: Conducted emissions are often unintended and undesirable.  ... </p>	
<p><b>TO: Section/Paragraph NOTE 19 and remaining NOTES (misnumbered starting with NOTE 1]</b>  NOTE 1: Under certain conditions, EMI can impact equipment safety.  NOTE 2: Conducted emissions are often unintended and undesirable.  ... </p>	
<p><b>Justification: (If necessary)</b> The NOTE numbering needs to be corrected back to the original numbering to comply with the <i>Style Manual</i>.</p>	
Origin of this editorial change <b>(Check one)</b>	<input type="checkbox"/> Commenter(s) / Comment(s) # <input checked="" type="checkbox"/> Other [Eric Sklar/Safety Guru Negative SG2-3]
<b>3</b>	<p><b>FROM: Section/Paragraph E176 ¶ 11.1.1 [actually 5.2.1], et seq</b>  5.2 <i>Definitions</i>  11.1.1 <i>conducted emission</i> — electromagnetic signals present on wires, cables, metal parts and other conductors of equipment.  11.1.2 <i>electrical overstress (EOS)</i> — exposure of a device or circuit to damaging electrical signals other than electrostatic discharge.  ... </p>
	<p><b>TO: Section/Paragraph E176 ¶ 11.1.1 [actually 5.2.1], et seq</b>  5.2 <i>Definitions</i>  5.2.1 <i>conducted emission</i> — electromagnetic signals present on wires, cables, metal parts and other conductors of equipment.  5.2.2 <i>electrical overstress (EOS)</i> — exposure of a device or circuit to damaging electrical signals other than electrostatic discharge.  ... </p>
	<p><b>Justification: (If necessary)</b> The paragraph numbering needs to be corrected back to the original numbering to comply with the <i>Style Manual</i>.</p>
<b>Motion</b>	To approve the above editorial change(s).
<b>Motion by/ 2<sup>nd</sup> by</b>	By: Eric Eisenbraun / SUNY RF (Albany) Second: Supika Mashiro / Tokyo Electron Ltd.
<b>Discussion</b>	None
<b>Vote</b>	7 Y-0 N; Motion passed

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

## VII. Approval Conditions Check

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

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

Note: See *Regulations § 9.6.2* for further information.

		Accepts		(Accepts + Valid Rejects)				
Approval Rate	=	27	/	28	=	96.4%		≥90%

X

#### Globally Approved (No Ratification Ballot needed):

Line Item 2 meets the Letter Ballot approval conditions for the global technical committee.

#### Need a Ratification Ballot:

Line Item 2 meets the Letter Ballot approval conditions for the TC Chapter and a Ratification Ballot will be issued to validate technical changes.



## Checks for Entire Document Including All Approved Line Items

### VIII. Safety Check

**Note:** This Safety check applies to the entire Standard or Safety Guideline including all the approved Line Items. See § 15 of the *Regulations* for further information.

Motion	x	This is not a <b>Safety Document</b> , when all safety-related information is removed, the Document is still technically sound and complete. ( <i>Regulations</i> ¶ 8.7.1)		
		This is a <b>Safety Document</b> , when all safety-related information is removed, the Document is not technically sound and complete. ( <i>Regulations</i> ¶ 8.7.2)		
		Safety Checklist ( <i>Regulations</i> ¶ 15.3) is complete and has been included with the Document throughout the balloting process. ( <i>Regulations</i> ¶ 15.1.2)		
Motion by/2 <sup>nd</sup> by		By: Clifton Brick / Axcelis Technologies Second: Eric Eisenbraun / SUNY RF (Albany)		
Discussion		None		
Vote		7 Y-0 N; Motion <span style="color: blue;">passed</span>		

### IX. Intellectual Property (IP) Check

**Note:** This Letter Ballot may cover all or part of a Standard or Safety Guideline. Regardless of the coverage, this IP check applies to the entire Standard or Safety Guideline including all the approved Line Items\*. See *Regulations* § 16 for further information.

x	The TC Chapter meeting chair asked those participating, if they were aware of any patented technology that might be relevant (see <i>Regulations</i> ¶ 16.3.1.1) to the Standard or Safety Guideline; or, any copyrighted items or trademarks that are used/reproduced (see <i>Regulations</i> ¶ 16.4.1.2) in the Standard or Safety Guideline. (Also see, <i>Regulations</i> § 8.8)			
x	The question is NOT answered in affirmative (No potentially material patented technology or use/reproduction of copyrighted items/trademarks is known.)	<b>GO TO SECTION X.</b>		
	The question is answered in affirmative	Is any of the known IPs a patented technology?	Yes, at least one of them is a patented technology	<b>GO TO IX (a) "Patented Technology" subsection</b>
			No	<b>GO TO IX (b) "Copyright items" subsection</b>

#### IX(a) Patented Technologies subsection

##### IX(a1) Total numbers of Patented Technologies to be dealt with

<b># Fill number</b>	(l) Known Patented Technology that might be relevant to	<b># Fill number</b>	(m) Number of patented technologies first became known to the TC Chapter on or after the day of the issuance of this Letter Ballot	<b>Postpone assessment of such patented technologies to be performed at the next scheduled TC Chapter meeting.</b>
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	the Standard/Safety Guideline	# Fill number	(n) Number of patented technologies first became known to the TC Chapter before the day of the issuance of this Letter Ballot	GO TO IX (a2)
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### IX(a2) Assessment of disclosed patented technologies

<b>Disclosed patented technology #1</b> (Brief description, e.g., patent title and number):		<b>Date of Assessment (If different from the date of Letter Ballot adjudication)</b> MM/DD/YYYY		
Is disclosed patented technology #1 found to be "might be material" to the Standard/Safety Guideline?	YES (It is a PMPT)	Is the use of this PMPT technically justified?	YES	PROCEED to assess NEXT one, or if this is the last one, GO TO IX(a3)
			NO	The Document is failed and returned to the TF
	NO	No further action is needed for patented technology #1		

This table is needed for each disclosed patented technology.

### IX(a3) LOA status check of PMPT of which inclusion assessed to be justified

<b>LOA Status of PMPT #1</b>				
Has an LOA for this patented technology been received from every owner ?	YES	PROCEED to check NEXT one, or if this is the last one, GO TO IX(b)		
	NO	MOTION	Ask ISC for special permission to publish.	The Document is failed and returned to the TF
			Quit activity.	
			Wait for LOA	PROCEED to check NEXT one, or if this is the last one, GO TO IX(b1)
		Motion by/ 2 <sup>nd</sup> by	Name (Company)/Name (Company)	
		Discussion	XXXX	
		Vote	XX Y-XX N; Motion passed (or failed)	

This table is needed for each PMPT of which inclusion assessed to be justified.

### IX(b1) Total numbers of copyrighted items to be dealt with

# Fill number	(o) Known copyrighted items that are used or reproduced to the Standard/Safety Guideline	o > 0 There is at least one known copy righted items that might be relevant to the Standard/Safety Guideline	GO TO IX (b2)
		o = 0 There is no disclosed copyrighted item	GO TO IX (c)

### IX(b2) Assessment of disclosed copyrighted items

Disclosed copyrighted item #1 (Brief description of its use in the Document):					
Is disclosed copyrighted item #1 used or reproduced in the Standard/Safety Guideline?		YES	Is the use/reproduction of this copyrighted item technically justified?	YES	PROCEED to assess NEXT one, or if this is the last one, GO TO IX(b3)
				NO	
		NO	No further action is needed for copyrighted item #1		

This table is needed for each disclosed copyrighted item.

### IX(b3) Copyright release status check of copyrighted item of which inclusion assessed to be justified

Copyright release Status of copyrighted item #1					
Has the copyright release been received from its owner ?.		YES	PROCEED to assess NEXT one, or if this is the last one, GO TO IX(c)		
	MOTION	NO		Ask ISC for special permission to publish.	
				Quit activity.	The Document is failed and returned to the TF
				Wait for copyright release letter	PROCEED to check NEXT one, or if this is the last one, GO TO IX(c)
		Motion by/ 2 <sup>nd</sup> by		Name (Company)/Name (Company)	
		Discussion		XXXX	
		Vote		XX Y-XX N; Motion passed (or failed)	

This table is needed for each copyrighted item of which use/reproduction assessed to be justified.

### IX(c) Assessment of disclosed (identified) trademark

Is there any trademark in the Standard/Safety Guideline?		YES	Is every instance of trademark use technically justified?	YES	GO TO IX(d)
				NO	
		NO	GO TO IX(d)		

### IX(d) IP check completion condition check

The co-chair checks if any Patented Technologies first become known to the TC Chapter on or after the day of the issuance of this Letter Ballot? i.e., m>0 in IX(a1)		YES	Sections IX(a2) and IX(a3) shall be completed and recorded for such patented technologies at next scheduled meeting of the TC Chapter. Until then, the TC Chapter shall NOT go to X (making motion to pass/fail this Document) (see Regulations ¶ 16.4.1.2) Until then this Letter Ballot Review is on hold.		
		NO	GO TO X		

## X. Action for This Document

<b>Motion</b> (Check all applicable items)	<input type="checkbox"/>	Line item(s) [X], [X] and [X] passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.
	<input checked="" type="checkbox"/>	Line item(s) [2] passed TC Chapter review with editorial changes and will be forwarded to the ISC A&R SC for procedural review.
	<input type="checkbox"/>	Line item(s) [X], [X] and [X] 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 checked="" type="checkbox"/>	Line item(s) [1] failed TC Chapter review and will be returned to the TF for rework.
	<input type="checkbox"/>	Line item(s) [X], [X] and [X] failed TC Chapter review and work will be discontinued.
<b>Motion by/ 2nd by</b>	By: Supika Mashiro / Tokyo Electron Ltd. Second: Paul Schneider / Intel Corporation	
<b>Discussion</b>	None	
<b>Vote</b>	7 Y-0 N	
<b>Final Action</b>	<input checked="" type="checkbox"/>	Motion passed
	<input type="checkbox"/>	Motion failed

**Note: If the use of PMPT or copyrighted item is justified by the TC Chapter, LOA or release form must be received before publication can proceed.**