



## Conduct of Engineering Request for Variance or Alternate Method

To display the *VAR Request Metadata* pane for this document, click **File > Info > Properties > Show Document Panel.**

### 1.0 General

1.1 Document Number: <b>VAR-10773</b>	1.2 Revision: <b>0</b>				
1.3 Brief Descriptive Title: <b>Civil/Utilities VAR &amp; CIR SMPO Authority Delegation</b>					
1.4 Affected Program: <b>Engineering Standards</b>	1.5 Request Type: <b>Variance</b>				
1.6a Affected Tech Area <b>99</b>	1.6b Affected Buildings <b>Sitewide</b>				
1.7 Requestor: <b>Oruch, Tobin H</b> Organization: <b>ES-FE</b>					
1.8 Revision History <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Revision Number</th> <th style="text-align: left; border-bottom: 1px solid black;">Changes and Comments</th> </tr> </thead> <tbody> <tr> <td style="padding-left: 20px;">0</td> <td>Initial issue.</td> </tr> </tbody> </table>		Revision Number	Changes and Comments	0	Initial issue.
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0	Initial issue.				

### 2.0 Affected Conduct of Engineering Program/Documents

2.1 Affected "P" Document: <b>P342 Engineering Standards</b>  If against the P document itself, revision (or <b>N/A</b> ): <p style="text-align: center;"><b>N/A</b></p>	2.2 Subordinate or related document(s) [AP, master spec, LANL ESM chapter & section; or code, Order, standard, etc.]: Document Title/No.: <b>ESM Ch. 1 Section Z10</b>  Revision <b>15</b> Document Title/No.: <i>Enter text..</i>  Revision <i>Enter text..</i> Document Title/No.: <i>Enter text..</i>  Revision <i>Enter text..</i>
2.3 Section/Paragraph: <b>Z10 Para. 6.1, Table Z10-1, and any other ESM/TSM location requiring SMPO or FOD action on VARs and CIRs.</b>  Note: VAR does not alter ESM or TSM Ch 3 & 7 wording directly but may it be posted with them as a resource to bring attention to it until they (and Z10) are revised to note the unique policy.	
2.4 Specific Requirement(s) as Written in the Document(s):  <ol style="list-style-type: none"> <li>1. Z10 Para. 6.1. Clarifications and Interpretations, A. "SMPOs are responsible for the technical content of the LANL Standards. They may delegate various authorities to Standards Discipline POCs."</li> <li>2. Z10 Table Z10-1 Standards Amendments: Clarifications, Interpretations, Alternates, and Variances — Methods and Approvals Summary   <div style="margin-left: 40px;">Type 2 (e.g., ESM) Column</div> </li> <li>3. SMPO preference or NNSA-delegated to SMPO (not Type 3)</li> </ol>	

- o including ESM and other docs with ML-1/2 pedigree

**Table Z10-1 Standards Amendments: Clarifications, Interpretations, Alternates, and Variances — Methods and Approvals Summary**

SMPO = LANL safety or security management program owner

Requirement Category (LANL)	TYPE 1	TYPE 2	TYPE 3			
Typical scope	specs	ESM	contract			
Basis for Requirement	<ul style="list-style-type: none"> <li>• POC preference and neither ESM* nor ESM-driven (not Type 2 or 3)</li> <li>• Nothing ML-1 or 2</li> </ul>	<ul style="list-style-type: none"> <li>• SMPO preference or NNSA-delegated to SMPO (not Type 3)               <ul style="list-style-type: none"> <li>o including ESM and other docs with ML-1/2 pedigree</li> </ul> </li> </ul>	NNSA contractual and not delegated to LANL			
POC Help	Phone or Email					
<b>Amendments</b>						
	Method	Approving Authority	Method	Approving Authority	Method	Approving Authority
Formal Clarification or Interpretation	Form <a href="#">2176</a>	POC	Form <a href="#">2176</a>	LANL Authority	Form <a href="#">2176</a>	LANL Authority
Alternate Method or Variance (Type 1 or 2)	Permission**	POC	Form <a href="#">2137***</a>	LANL Authority	N/A	N/A
Equivalency or Exemption (Type 3)	N/A	N/A	N/A	N/A	Form <a href="#">2137****</a> + <a href="#">P 310-1, Exemptions or Equivalencies to Appendix B Requirements or 10CFR851 variance website</a> ; etc.	NNSA Los Alamos Field Office or higher
If constructed work is contrary to Standards	An NCR is normally required; when NCR proposes use-as-is or repair disposition an amendment per above is also required to involve institutional requirement owner. See NCR topic below (6.2.C.)					

2.5 Contractual, preference, or other basis for requirement in 2.4:

For scope not within NA-LA assignments to LANL individual authorities (such as Owner or building official), having the SMPO approve a VAR or CIR is a LANL preference.

2.6 Type of VAR from ESM Chap 1, Z10 [*Applies only to standards variances*])

Type 2

2.7 Discipline

Civil

### 3.0 Request Information & Comments

3.1 NCR required (work has occurred)? **No**

If Yes, NCR Number: [Enter text.](#)

3.2 System/Component Affected

OpSystem Acronym & Name [[Select OpSysAcronymAndName](#)]

System Number or Name [[Select SystemNumberOrName](#)]

3.3 Highest ML Level

ML-1

### 3.4 Proposal with Justification/Compensatory Measures:

#### **PROPOSAL**

1. For the scope detailed below,
  - Lower/delegate the authority to approve many ESM and TSM requirement-related Variances and Alternate Methods (VARs), and Clarifications and Interpretations (CIRs), previously the purview of the Safety Management Program Owner (SMPO) for Engineering (typically the ES-DO Division Leader), to the Group Leader for ES-Utilities and Infrastructure (ES-UI).
  - In addition, the VAR form's FOD approval signature may (and should) be completed by the FOD Ops Manager (and, when related to LANL preferences not required by any code or standard, is optional). (Note, such is already largely the case for TSM underground utility distance matters).

#### **Proposal Scope (exclusions below)**

##### Z10 Type 2 Standards material

1. In ESM or TSM Ch 3 Civil (i.e., where Civil POC "owns")
2. For ESM or TSM Ch 7 Electrical, all Utilities-owned SSC requirements (G40XX Sections, i.e., where Electrical POC "owns")
3. Material in the Civil and electrical utility Master Specs and Standard Details derived from above manual requirements (whereas)

#### **Not in Scope (exclusions)**

1. Type 1 Variance (e.g., spec-only preference), which remains POC-only purview via approval email
2. Issuance of new institutional requirements (new or higher ESM/TSM expectations) by VAR method.
3. Any requirement or responsibility assigned by NA-LA to the Owner (pressure safety) or Building Code Official (BCO aka LBO).

Note, while the intent of the NA-LA assignments is the administration of pressure and building codes themselves, this VAR's exclusions are extended to the entire scope/applicability of, for pressure safety, P101-34 and ESM/TSM Ch. 17, *Pressure Safety* and, for the Building Code Program, ESM/TSM Ch. 16, *Building Code Program* (e.g., ESM IBC-GEN Tables IBC-GEN-1, and -2 in Rev. 12).

Basis: Table Z10-2 LANL Authorities (e.g., from Delegation by NNSA)

To Building Code Official per Ref. 1, Att. C

To Owner and Owner's Inspector per Ref. 1, Att. B

#### **Justification**

Most of the Civil chapter, and to a lesser extent the site electrical sections of Chapter 7, is not driven by contractual codes or standards to the same extent as facilities. The material is often LANL preference based on industry standards/recommendations for public utilities (which LANL is not), good practice, or LANL historical experience. As such, when it does not fall into the NA-LA assigned subject areas, the ES-UI Group Leader can be the final approver to vary, clarify, or interpret, and is often the most knowledgeable about the basis and implications of doing so (or manages the SMEs that do).

As noted above in field 2.4, the ESM (Z10 6.1) already allows for SMPO delegation of "various authorities to Standards Discipline POCs." So, while this VAR does not impact the POC role (historically Type 1 VAR authority), it is in line with the longstanding practice of SMPO limited authority delegation.

This is also in keeping with P342 *Engineering Standards* (r4); §4.4 Roles and Responsibilities (for SMPOs and their representatives) bullet 4, states:

Allow alternate methods and variances to standards within the authority given by the designation process and when appropriate. (SMPOs and representatives may not act to reduce requirements of any DOE Order, Rule [e.g., 10 CFR 851, Worker Safety and Health Program], or referenced code unless formally authorized by the DOE.)

### 3.5 Attachments

Document Title or Description n/a

3.6a Project ID N/A	3.6b: Project Name N/A	3.6c: Code of Record Date N/A
3.7 Duration: Lifetime	3.8a If Finite Period, Start Date: Click to enter a date.	3.8b End Date: Click to enter a date
3.8c Provide the PFITS number for tracking removal/correction: [PFITSNum]		
3.9 USQD/USID required (Nuclear, High/Mod Hazard)? No If Yes, USQD/USID Number Click here to enter text.		
3.10 QA Review for process change matters potentially affecting LANL's NQA-1 implementation Is a QPA Determination required?: No If Yes, then: Choose an item. QPA Comments: Enter text..		
3.11 POC Determination: Accept POC Comments: Enter text..		
3.12 Management Program Owner's (SMPO) Approval for P341 and APs; P342, ESM, ML-1 and -2, and Contract Matters; and P343  SMPO Determination: Accept Comments: Enter text..		

**4.0 Participant Signatures** **NOTE:** DO NOT ADD NAMES FROM WITHIN WORD! Save and close the form first, then do 1-4 below:

1. From the SharePoint library, select the document, then click the **ellipsis (...)** in the second column; a small dialog appears
2. In the small dialog click the **ellipsis** again
3. Click **Edit Properties** and check out the document if prompted to Enter names using the controls provided, then **Save**

4.1 POC (Management Program Owner's Representative):  Oruch, Tobin H	Organization ES-FE	Signature  SIGNATURE ON FILE
4.2 Facility Design Authority Representative  [FDARName] FDAR signature not required <input checked="" type="checkbox"/>	Organization Enter text..	Signature
4.3 LANL Owing Manager (FOD or R&D/Program)  [FODorPrgmMgrName] FOD or Program Manager signature not required <input checked="" type="checkbox"/>	Organization Enter text..	Signature

<p>4.4 Quality Reviewer's Name:</p> <p>[QPAName]</p> <p>QPA review/signature not required <input checked="" type="checkbox"/></p>	<p>Organization</p> <p>Enter text.</p>	<p>Signature</p>
<p>4.5 Safety or Security Management Program Owner's Approval for P341 and APs; P342, ESM and Contract Matters; and P343</p> <p>Richardson, Michael Joseph</p> <p>SMPO signature not required (Type 1 variance) <input type="checkbox"/></p>	<p>Organization</p> <p>ES-DO</p>	<p>Signature</p> <p><b>SIGNATURE ON FILE</b></p>
<p>4.6 Additional Signer 1</p> <p>[AdditionalSigner1]</p> <p>Role: Enter text.</p>	<p>Organization</p> <p>Enter text.</p>	<p>Signature</p>
<p>4.7 Additional Signer 2</p> <p>[AdditionalSigner2]</p> <p>Role: Enter text.</p>	<p>Organization</p> <p>Enter text.</p>	<p>Signature</p>

<p>4.8 CoE Administrator Signature</p> <p>Leyba, Matthew Anthony</p> <p><b>NOTE:</b> The CoE Admin is always the last signature placed on this document. The date of that signing is the date of this document.</p>	<p>Signature</p> <p><b>SIGNATURE ON FILE</b></p>
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