



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: VAR-10258	1.2 Revision: 0						
1.3 Brief Descriptive Title: Concrete encasement of underground low-voltage conduits							
1.4 Affected Program: Engineering Standards	1.5 Request Type: Variance						
1.6a Affected Tech Area 99	1.6b Affected Buildings Sitewide						
1.7 Requestor: Stromberg, Eric R Organization: ES-EPD							
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">1.8 Revision History</th> <th style="border-bottom: 1px solid black;">Revision Number</th> <th style="border-bottom: 1px solid black;">Changes and Comments</th> </tr> </thead> <tbody> <tr> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;">0</td> <td style="border-bottom: 1px solid black;">Initial issue.</td> </tr> </tbody> </table>		1.8 Revision History	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: P342 Engineering Standards If against the P document itself, revision (or N/A): Choose an item.	2.2 Subordinate or related document(s) [AP, master spec, LANL ESM chapter & section; or code, Order, standard, etc.]: Document Title/No.: Engineering Standards Manual, STD-342-100, Chapter 7 Electrical, Section D5010 Revision 4 (Nov 2011) Document Title/No.: <input type="text"/> Revision <input type="text"/> Document Title/No.: <input type="text"/> Revision <input type="text"/>
2.3 Section/Paragraph: 2.9 Raceway Systems; Paragraph F	
2.4 Specific Requirement(s) as Written in the Document(s): Provide concrete-encasement and warning tape for underground low-voltage service and feeder conduit outside the perimeter of the building. Provide warning tape for underground low-voltage service and feeder conduit inside the perimeter of the building.	
2.5 Contractual, preference, or other basis for requirement in 2.4: Preference. There are no regulatory drivers for this requirement.	

2.6 Type of VAR from ESM Chap 1, Z10 [<i>Applies only to standards variances</i>] Type 2	2.7 Discipline Electrical

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 EDS_Electrical Distribution System System Number or Name EDS_Electrical Distribution System	3.3 Highest ML Level ML-1	
3.4 Proposal with Justification/Compensatory Measures: Provide concrete-encasement for underground low-voltage service and feeder conduits where indicated on drawings. Provide warning tape for underground low-voltage conduits that are not concrete-encased. Justification: There is no regulatory driver for encasing outdoor underground conduits in concrete. The only instance where conduits are required to be encased concrete is when service conductors are run inside a building. The ESM requirement for encasing all outdoor conduit runs in concrete is very expensive and should only be done when there is a compelling reason to do so. Removing the requirement from the ESM does not prevent projects from encasing conduit runs, if it is deemed prudent to do so. The expectation is that, upon incorporation of this variance (e.g., in the next revision of the ESM), the requirement for concrete encasement will be removed.		
3.5 Attachments Document Title or Description Enter text...		
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**

<p>4.1 POC (Management Program Owner's Representative):</p> <p>Stromberg, Eric R</p>	<p>Organization</p> <p>ES-EPD</p>	<p>Signature</p>
<p>4.2 Facility Design Authority Representative</p> <p>[FDARName]</p> <p>FDAR signature not required <input checked="" type="checkbox"/></p>	<p>Organization</p> <p>Enter text..</p>	<p>Signature</p>
<p>4.3 LANL Owing Manager (FOD or R&D/Program)</p> <p>[FODorPrgmMgrName]</p> <p>FOD or Program Manager signature not required <input checked="" type="checkbox"/></p>	<p>Organization</p> <p>Enter text..</p>	<p>Signature</p>
<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>Goen, Lawrence Kenneth</p> <p>SMPO signature not required (Type 1 variance) <input type="checkbox"/></p>	<p>Organization</p> <p>ES-DO</p>	<p>Signature</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>Salazar-Barnes, Christina L</p> <p>NOTE: 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>
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