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## System Description: LBNL Requirements Management Governance

### 1. Purpose

This document describes the system of governance for managing contractually-based requirements at Lawrence Berkeley National Laboratory (LBNL).

### 2. Applicability

This system applies to management of all requirements determined applicable to LBNL pursuant to terms of the U. S. Department of Energy (DOE) Contract No. DE-AC02-05CH11231 (Contract 31) and any LBNL generated requirements, policies and institutional documents. Contract 31 includes Clause I.79, DEAR 970.4204-2, *Laws, Regulations and DOE Directives*, which encompasses applicable federal, state and local laws and regulations. The University of California (UC) as contracting manager imposes UC specific requirements.

#### 2.1 Exceptions

None.

### 3. System Description

The process for managing contractually-based requirements at LBNL is described in *LBNL Requirements Management Process Description*, document #04.04.001.003. Overall, it includes the steps of identifying the owner(s) of a requirement, analyzing meaning and impact of a new/changed requirement; and then setting forth applicable implementation mechanisms for the requirement to ensure flow down to the workforce. Implementing mechanisms include, but are not limited to, documents, training, programs, communication, and definitions of roles and responsibilities. The process for document management is described in, *LBNL Managing Institutional Documents Process Description*, document #10.06.001.001. The process for managing requirements that may be considered for adoption as LBNL requirements is described in *Processes during Pre-Adoption of LBNL Requirements*, document # 04.04.001.300.

The governance organization to support the processes of coordinating actions related to Laboratory requirements, policy, and institutional documents is illustrated in Figure 1. Central is the Requirements Management Committee (RMC), which reports to the Associate Laboratory Director of Operations/Chief Operating Officer (ALDO/COO). The COO appoints a chair from the RMC membership to serve for three years. The RMC is supported by divisional subject matter experts (SMEs) and by multiple Working Groups, comprised of cross-functional SMEs and stakeholders. The RMC collaborates with Laboratory

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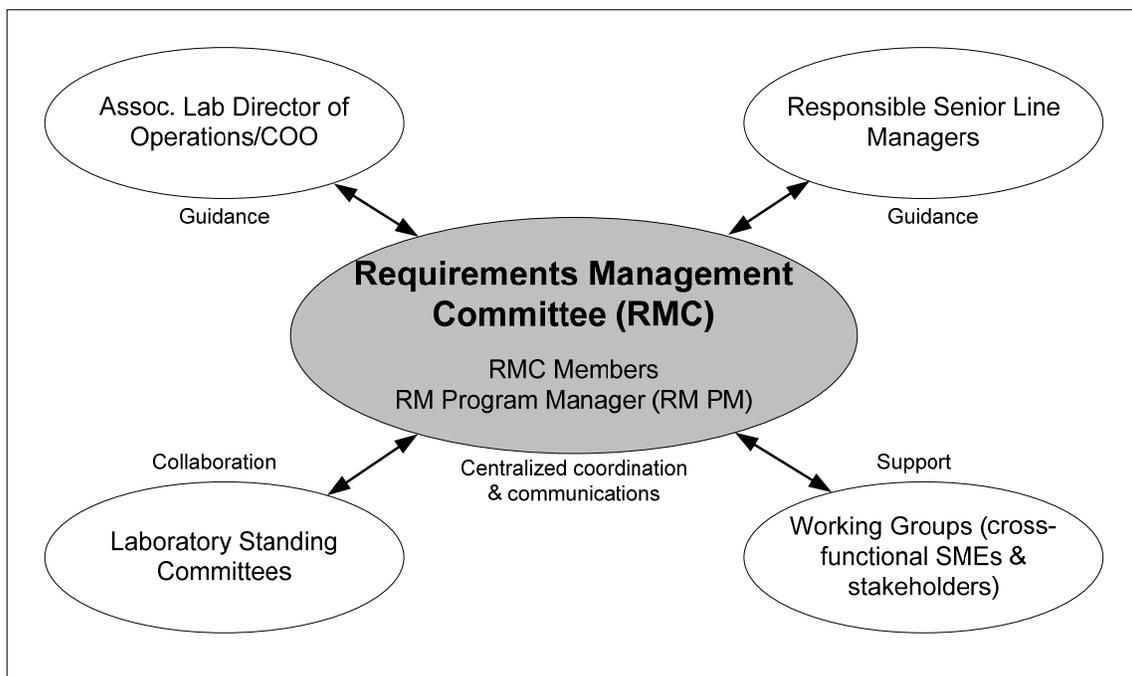
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standing committees (for example, the Laboratory’s Safety Advisory Committee) for their respective fields of expertise.

The Requirements Management Program Manager (RM PM) has responsibility for the requirements management processes and institutional document management processes. The RM PM and RMC work closely with and at the direction of the Senior Line Manager responsible for policy matters related to the Sr. Line Manager’s respective functional area. The RMC has responsibility to make recommendations on requirements-related matters to Sr. Line Management, to champion the RM process and cross-functional view, and to perform quality checks on requirements-related work products by SMEs, functional groups and working groups.

Senior Line Managers have signature authority and responsibility for execution of requirements-related matters. That is, line management is responsible for implementation of the RM process, including development of supporting documents. Line management is responsible for ensuring compliance with the Laboratory’s documentation management process.

**Figure 1: RM Governance Relationships**



**4.0 Roles/Responsibilities**

Role	Authorization/Responsibilities
Requirements Management Program Manager (RM PM)	Appointed by Office of Institutional Assurance (OIA)/Office of Contract Assurance (OCA). <ul style="list-style-type: none"> <li>Manages the Laboratory’s requirements management and institutional document management processes. Is the main driver and champion of these processes. Has author/review/recommendation responsibilities for quality and completeness of RM process and institutional document management process documentation.</li> </ul>

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	<ul style="list-style-type: none"> <li>• Serves as the Laboratory’s contact point on requirements and institutional document management-related matters. Is the focal point for receipt of new or modified requirements accepted into Contract 31 or mandated by applicable federal, state, or local laws, standards or regulations. Notifies RMC of such matters.</li> <li>• Works with UCOP and Berkeley Site Office staff on requirements-related matters.</li> <li>• Is a member of the RMC.</li> <li>• Leads RMC and other cross-functional teams in solving problems using risk based-analysis techniques.</li> <li>• Works with RMC members and RMC chair as required to meet the RMC’s and RMC members’ responsibilities within the framework of the RM process.</li> <li>• Coordinates inputs from the RMC members, the Working Groups, and the responsible Sr. Line Manager. Presents to RMC for discussion and resolution.</li> <li>• Applies broad knowledge of operations functions             <ul style="list-style-type: none"> <li>• To assess the quality, accuracy, efficiency and effectiveness of recommendations generated by the RMC, the Working Groups</li> <li>• To seek resolution of issues or conflicts related to Laboratory policy or document matters at the lowest levels possible.</li> </ul> </li> <li>• Oversees management of Laboratory’s policy manual.</li> <li>• Maintains the Requirements Management (RM) database for tracking requirements, their associated policy areas (PA), owners, records of implementing mechanisms, and their flow down to implementing documents. Maintains accuracy and currency of the RM tracking system. Has review/approval responsibility for quality and completeness of requirement, policy, and document metadata.</li> <li>• May have skills and experience to fill RMC chair role and responsibilities.</li> </ul>
<p>Requirements Management Committee (RMC)</p>	<p>Representation from the Operations Functions, the Science Divisions, Office of Contract Assurance (OCA), Technology Transfer, Research and Institutional Integrity Office (RIIO), Engineering, and LBNL Legal. The ALDO/COO appoints a chair from the RMC membership to serve for three years. Quorum for RMC meetings is based on a pre-meeting agenda and include at least the RMC chair, the RM PM, and representatives having a stake in the agenda items.</p> <p>LBNL RMC members are nominated by their respective senior line managers, and appointed by ALDO/COO. All members serve for a 3 year term, with possibility of extension.</p> <ul style="list-style-type: none"> <li>• Provides centralized coordination and communications on Contract 31 requirements and related Lab policy matters.</li> <li>• Applies the RM process in the review and disposition of Requirements Review Cases related to requirements, Laboratory policies, and on a case-by-case basis Laboratory implementing documents. Ensures that flow-down from requirement into implementing documents is addressed.</li> <li>• Applies cross-functional knowledge on requirements matters.             <ul style="list-style-type: none"> <li>• Assesses the Laboratory wide impacts of new or changed requirements, and adopts a holistic response.</li> <li>• Reviews and recommends best qualified team members to address requirements analyses, implementation mechanisms and plans, policy and procedure documents.                 <ul style="list-style-type: none"> <li>▪ Such team members include Working Group (WG) members subject matter experts (SME), stakeholders.</li> <li>▪ Ensures teams are cross-functionally represented.</li> <li>▪ Recommends collaboration with other Laboratory standing committees whenever possible.</li> </ul> </li> <li>• Reviews and applies cross-functional knowledge and judgment on WG and SME</li> </ul> </li> </ul>

	<p>work products (analyses, implementation plans, policies) from a quality perspective.</p> <ul style="list-style-type: none"> <li>▪ Reviews analyses and plans for practical implementation (cost, breadth of impact, simplicity, etc.).</li> <li>▪ Reviews for evidence that risk analysis and problem solving techniques and best practices have been applied.</li> <li>• Advises responsible Sr. Line Manager on WG/ SME work products.</li> <li>• Drives for process simplicity. Seek resolution and decision-making at the lowest levels possible. Review processes at least annually and make improvements for efficiency and effectiveness.</li> <li>• Reviews communications plan to ensure effectiveness and thoroughness.</li> <li>• Reports to ALDO/COO.</li> <li>• Champions RM and institutional document management processes.</li> </ul>
<p>RMC Chairperson</p>	<p>Appointed by ALDO/COO for a three year term. Duties and responsibilities are expected to require approximately 20% of full time. RM PM may be a viable candidate for the position.</p> <ul style="list-style-type: none"> <li>• Chairs the Requirements Management Committee (RMC), and generally ensures that the RMC fills its responsibilities to ensure that new/changed requirements are appropriately reviewed, analyzed, and translated into LBNL policies and procedures, and that implementation plans supporting policy changes or introduction of policy are appropriately scoped, comprehensive, and cross-functionally balanced.</li> <li>• Prepares agenda for and leads RMC meetings.</li> <li>• Facilitates communications among the RMC, Working Groups, Sr. Line Managers to ensure timely completion of requirements and policy matters. Drives for resolution of conflicts amongst these parties.</li> <li>• Encourages RMC to apply broad knowledge of operations functions to ensure the quality, accuracy, efficiency and effectiveness of detailed recommendations generated by the RMC and the Working Groups.</li> <li>• Coordinates the reviews and preliminary concurrence on institutional policies, and related interpretation and impact analyses and implementation plans recommended by Working Groups and the RMC.</li> <li>• Oversees preparation by RMC of recommendations to the responsible Sr. Line Manager institutional policies and related implementation plans for final approval.</li> <li>• With line management, RMC representatives, and Public Affairs, ensures timely and directed communications on Laboratory requirements, policy and institutional document matters.</li> <li>• Provides regular reports to the ALDO/COO. Provide courtesy updates to DOE Berkeley Site Office, UCOP, and Laboratory standing committees.</li> <li>• With RMC members, feeds accurate and current information into the RM tracking system maintained by the RM PM.</li> <li>• Is responsible for initiating process for replacing or renewing member appointments, when required.</li> </ul>
<p>RMC Member</p>	<p>LBNL members are nominated by respective senior line manager, appointed by ALDO/COO. UCOP member is appointed by UCOP Vice President for Laboratory Management. Duties and responsibilities are expected to be approximately 5%. All members serve for a 3 year term.</p> <ul style="list-style-type: none"> <li>• Must have and apply experience and breadth of knowledge of requirements, policy, and specific functional operation in his/her respective areas of expertise. Must have and apply good working knowledge and experience of general Laboratory operations.</li> <li>• Must be trained on LBNL RM and document management processes.</li> <li>• Is the communications conduit between the Division and RMC for Division policy-related efforts, whether initiated by the Division or by other functions.</li> </ul>

	<ul style="list-style-type: none"> <li>• Has authority (as delegated by his/her Sr. Line Manager) to accept RMC actions or assignments on behalf of his/her respective functional area.</li> <li>• Communicates actions and/or assignments to respective Sr. Line Manager on regular basis.</li> <li>• Must consistently attend and participate at RMC meetings. Applies skills and experience in risk analysis and problem solving techniques.</li> <li>• May be assigned to other RM roles (Working Group, functional document control administration). [Note: assignment to multiple roles is not recommended, though in the short term is recognized as necessary.]</li> </ul>
<p>Subject Matter Expert (SME)</p>	<p>May be called upon by the RMC to participate on a Working Group for a specific case. Agreement and approval by his/her respective line manager chain. Assignment is on a per case basis. Can be a Laboratory employee or consultant.</p> <ul style="list-style-type: none"> <li>• Has specialized knowledge about a certain topic or field of interest.</li> <li>• Provides technical expertise to the RMC and/or Working Group as it relates to the interpretation and implementation of requirements, including the development and review of policies and implementing documents.</li> <li>• May be a Working Group member, an author or reviewer</li> <li>• (Lead or senior functional SME) Has ownership and accountability for the technical content, accuracy, and completeness of policies.             <ul style="list-style-type: none"> <li>○ Leads in the identification and translation of requirements. Seeks and has the assistance of WG and RMC member.</li> <li>○ Leads the development and/or revision of policy and implementing documents within area of responsibility in accordance with requirements. Seeks and has the assistance of WG and RMC member.</li> <li>○ Coordinates document reviews, comment resolution, and implementation actions.                 <ul style="list-style-type: none"> <li>▪ May be delegated by Sr. Line Manager to approve certain institutional documents upon completion of required reviews.</li> </ul> </li> <li>○ Draws on RMC, other Laboratory standing committees, respective Sr. Line Manager for assistance, as required.</li> <li>○ Is delegated authority by Sr. Line Manager to accept RMC actions or assignments on behalf of his/her respective policy area.</li> <li>○ Drives for timely completion of case assignments.</li> <li>○ Must be trained on LBNL RM and document management processes.</li> </ul> </li> <li>• Applies skills and experience in risk analysis and problem solving techniques.</li> <li>• Applies leadership skills in working with WG members, the RMC, other Laboratory standing committees.</li> <li>• Communicates progress, actions and/or assignments to the RMC and respective Division Sr. Line Manager on regular basis.</li> </ul>
<p>Working Group (WG)</p>	<p>Comprised of members from affected and/or responsible divisions, having related special knowledge on the particular requirement or case in question. Membership of any Working Group is for the duration of the particular assignment.</p> <ul style="list-style-type: none"> <li>• Members are recommended by RMC in collaboration with Laboratory standing committee(s).</li> <li>• RMC ensures WG membership is cross-functionally represented.</li> <li>• RMC nominates WG lead.</li> <li>• Typical WG size is 3 to 6 members.</li> <li>• Recommendations for WG member and SME participation are approved by respective Senior Line Managers.</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• Under leadership of a RMC member or lead SME, performs detailed analyses, and determine detailed and practical implementation plans, with consideration of cost, simplicity, impact, and overall risk.</li> </ul>

	<ul style="list-style-type: none"> <li>• Make recommendations in a timely fashion to the RMC, RM PM, Sr. Line Manager, and if applicable, the WG's sponsoring standing committee.</li> </ul>
Working Group (WG) member	Nominated by RMC and approved by Senior Line Manager, on a per case basis.
	<ul style="list-style-type: none"> <li>• Must consistently attend and participate at Working Group meetings.</li> <li>• Must have and apply experience and specialized knowledge in his/her respective areas of expertise to the specific case or requirement in question.</li> <li>• Must have and apply skills and experience in risk analysis and problem solving techniques.</li> </ul>
Senior Line Manager	<ul style="list-style-type: none"> <li>• Has responsibility and accountability for managing Laboratory requirements that pertain to his/her area of responsibility, including identification of what the requirements are and implementing them through policies, programs, procedures, etc.</li> <li>• Has responsibility and authority to define and implement changes in policies, programs, procedures, etc. resulting from changes to Contract 31, UC requirements, and to applicable federal, state, local laws and regulations, as well as any direction provided by supplementary letters or memos from DOE or UCOP.</li> <li>• Has ownership and accountability for the technical content, accuracy and completeness of respective Function's documents. Approves institutional documents upon completion of required reviews.</li> <li>• Ensures compliance with LBNL requirements and document management policies and procedures.</li> <li>• Communicates to the RM PM and RMC objectives and general guidance on implementation for the policy under question.</li> <li>• Reviews and approves policy and detailed implementation plans recommended by a Working Group and the RMC. Approval implies commitment of resources and funding for coverage of his/her function. For those cases where multiple functions are participating, approvals must be obtained from each participating function.</li> <li>• Has responsibility for execution of approved plans for implementing mechanisms supporting a Laboratory requirement or policy, including assigning resources and funding.</li> <li>• Works with the RM PM and RMC to resolve issues that may arise in the process of review and translation of requirements, policy into implementation.</li> <li>• Nominates representative(s) to RMC.</li> <li>• Appoints WG members, SMEs, Document Authors.</li> <li>• Delegates authority to lead SMEs and RMC member to accept RMC actions or assignments on behalf of the Sr. Line Manager's respective policy area. Has option to delegate approval authority to RMC member.</li> </ul>
Associate Laboratory Director of Operations/Chief Operating Officer (ALDO/COO)	<ul style="list-style-type: none"> <li>• Has full responsibility and authority to make, implement, and enforce policies related to the Laboratory Operations.</li> <li>• Works with the RM PM and Sr. Line Managers to resolve difficult or complex policy matters, (for example, setting priorities or providing judgment on controversial policy or implementation, or allotting funds) that may arise in the process of review and translation of requirements or policy into implementation.</li> <li>• Reviews and approves policy and detailed implementation plans recommended by the Sr. Line Managers and the RMC, as required. Reviews and approves institutional documents, as required.</li> <li>• Has the prerogative to establish a cross-functional senior management committee to assist on RM issues.</li> <li>• Appoints RMC members and RMC chairperson.</li> </ul>
Laboratory Director	<ul style="list-style-type: none"> <li>• Has full responsibility and authority to make, implement, and enforce policies related to the Laboratory.</li> </ul>

	<ul style="list-style-type: none"> <li>Reviews and approves policy and detailed implementation plans recommended by the ALD/Chief Operating Officer</li> </ul>
LBNL standing committees	<ul style="list-style-type: none"> <li>These are institutional committees that support various aspects of its scientific and management functions.</li> <li>These have expertise and responsibilities in the particular area of committee focus.</li> <li>These committees may have sub-committees or be a source of resources that may provide expertise to RM-related matters.</li> </ul>
User Groups	<p>Members are selected by the Working Group and/or SME, with advice and inputs from line managers, Laboratory standing committees. Members are a representative set of users of process and procedural documents being developed by a Working Group. Assignment is on a per case basis.</p> <ul style="list-style-type: none"> <li>Typically, the members are asked to review and/or test a document, and provide feedback.</li> </ul>
Document Author	<p>Recommended by the, Sr. Line Manager or RMC member to prepare institutional documents. Usually is a SME. Appointed by Sr. Line Manager. Assignment is on a per case basis.</p> <ul style="list-style-type: none"> <li>Ensures clarity, accuracy, usability, and conciseness of the document(s).</li> <li>Provides technical expertise to support the interpretation and implementation of requirements.</li> <li>Gathers information from other functional and/or policy areas that have knowledge or expertise relevant to the document.</li> <li>At the direction of the RMC member, prepares document for review and approval by others. Obtains approvals for the assigned document.</li> <li>With the oversight of the RMC member and assistance of CSO editor, prepares institutional documents for publication. Has responsibility for all technical content and the integrity of any links introduced.</li> </ul>
Creative Services Office (CSO) Editor	<ul style="list-style-type: none"> <li>Works closely with RM PM to maintain the Laboratory's Requirements and Policies Manual (RPM)</li> <li>Works closely with the RMC members, RM PM, Document Author, and SMEs to develop and maintain Laboratory policy documents.</li> <li>General duties include: rewriting, copy editing, proofing Laboratory policies; verifying that referenced URLs are correct and current; publishing approved Laboratory policies in the Requirements and Policies Manual.</li> <li>Updates as necessary user-accessible web features such as links, institutional glossary, search parameters, and so forth.</li> <li>At the direction of the RM PM or Director of Office of Institutional Assurance, performs searches for past policies.</li> </ul>
Functional Document Coordinator	<p>An optional resource hired by a Function to manage the Function's portfolio of institutional and functional documents per the Laboratory document management process and policy.</p> <ul style="list-style-type: none"> <li>Works closely with Document Author, RMC member, and WG to develop documents.</li> <li>Manages Function's document database.</li> <li>Manages Function's repository of functional documents. Ensures uploading of final approved institutional documents into institutional document repository, and provides the RM PM with accurate and current institutional document metadata.</li> </ul>

As noted, the RMC and RM PM have responsibility to strive for resolution of matters at the lowest levels possible. However, for resolution of increasingly difficult or complex policy matters, the RMC and RM PM will seek guidance first from Sr. Line Manager(s), and then, if necessary, seek the assistance of the ALDO/COO, and then, if necessary, the Laboratory Director.

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Table 1 summarizes the participant membership and the responsibilities of the several levels in the RM Program shown in Figure 1.

**Table 1: Participants, Roles, Responsibilities for RM Program**

RM Org Level	Participant membership	Requirements Analysis	Policies	Implementation Plan	Institutional Documents
Lab Director	--		A		A*
ALDO/COO	Ops/Science	A	A/R	A	A*
Senior Line Manager	Ops	A/R	A/R	A/R	A
RMC	Ops/Science	A/R	R	A/R	A/R
RM PM	Ops	A/R	R	R	A/R
Working Group	Ops/Science	R	R	R	R
SMEs	Ops/Science	R	R	R	R
Document Author	Ops/Science		R		R

A = Approve, R = Recommend, "Ops" = Operations

A\*: A small set of institutional documents require the review and approval of DOE, UCOP and therefore the Lab Director or COO.

Policy approval: by Sr. Line Manager and/or ALDO/COO.

Implementation Plan approval: by Sr. Line Manager and RM PM.

## 5. Definitions

Term	Definition
Contract 31	"Contract 31" is short for Contract No. DE-AC02-05CH11231 between the U. S. Department of Energy and the University of California describing the terms for management of LBNL. The Contract includes a statement of work (SOW) for the science missions and it details the requirements for managing the operations and business of LBNL.
Deliverable	Any measurable, tangible, verifiable outcome, product, result, or item that must be produced to satisfy a requirement under the terms of an agreement, contract, or implementing mechanism. These include but are not limited to reports, plans, inventories, inspections, assessments, documents, procedures, programs, data, etc. A requirement specifies a deliverable, and therefore a deliverable is subject to requirements management practices
Document	Written, visual, audio-video-recorded information stored in the form of hard copy, film, magnetic tape, electronic data, or in an on-line, web-based format
Document Information	Also referred to as document metadata, and includes (but not limited to) titles, document numbers, revision dates, and for traceability, the related source requirements and implementing documents' information.
Document Management	A business management process that ensures organization access to current, reliable, and concise information. Document management process includes document control, change control, configuration control, periodic review, and communication/distribution.
Functional area	A grouping of individuals on the basis of the function each performs in the organization (for example, human resources or IT). A Division, Department, or Office at the Laboratory. Functional areas may have oversight of one or more policy areas, or may share responsibility for a policy area with another function.

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Governance	The persons (or committees, etc.) who make up a body for the purpose of administering a program or process
Institutional document	A publication authorized by Laboratory management that delineates laboratory-wide or multi-departmental policy, procedures, regulations, programs, plans, and so forth. Scientific and technical publications and reports are not included in this definition.
IPOC	Institutional Point of Contact, a person whose responsibilities include monitoring, assessing, negotiating <u>potential</u> or <u>possible</u> changes affecting Contract 31.
Parsing	Breaking down a source requirement document to an appropriate level of detail for linking associated performance expectations to implementing mechanisms
Policy Area (PA)	A grouping of related policies. Policy areas are organizationally neutral; that is, they do not reflect organizational structure. Though organizationally neutral, Policy Areas typically are assigned to an Operations function. Some policy areas may span across more than one function, and a primary functional owner is therefore assigned.
RM Database	A database tool for managing requirements and related information, including tracking requirements, their associated policy areas, owners, records of implementing mechanisms, and their flow down to implementing documents.
Requirements review case	An instance or a question related to a requirement that has been logged into the Requirements Management database for disposition by the RM Committee.
Source requirements document	A high level document that establishes performance expectations as a result of a citable policy, directive, law, regulation, or contract. Examples: - Clause H.18 – Application of DOE Contractor Requirements Documents - 10 CFR 851, Work Safety and Health Program
Senior Line Manager	The highest level or most senior level of authority within a division or office. For example, the EHS Division Director or the Chief Human Resources Officer or Chief Financial Officer, or Public Affairs Department Head.

## 5.1 Acronyms

ALDO/COO	Associate Laboratory Director of Operations/Chief Operating Officer
IPOC	Institutional Point of Contact
LM	Line Manager (Senior)
PA	Policy Area
RM	Requirements Management
RM PM	Requirements Management Program Manager
RMC	Requirements Management Committee
ROD	Record of Decision
RPM	Requirements and Policies Manual
SME	Subject Matter Expert
WG	Working Group

## 6. References

6.1 Source Requirements Documents	
Requirement ID	Title
DOE Order 414.1D	<i>Quality Assurance</i>
Contract 31, Clause I.79	<i>DEAR 970.5204-2, Laws, Regulations, and DOE Directives (Dec 2000) (Deviation)</i>
Contract 31, Clause I.76	<i>DEAR 970.5203-1, Management Controls</i>
Contract 31, Clause H.18	<i>Application of DOE Contractor Requirements Documents</i>
Lab PUB 3111	<i>LBNL Quality Assurance Program Description</i>
04.04.001.001	<i>LBNL Requirements Management Program Description</i>

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6.1 Source Requirements Documents	
04.03.001.000	<i>LBNL Quality Assurance Policy</i>

6.2 Related Implementing Documents (including procedures, forms, training)	
Document Number	Title
10.06.001.001	<i>LBNL Managing Institutional Documents Process Description</i>
04.04.001.003	<i>LBNL Requirements Management Process Description</i>
04.04.001.101	<i>Procedure – Analyzing Requirements and Determining Risks and Impacts</i>
04.04.001.102	<i>Procedure – Developing, Reviewing, Approving an Implementation Plan</i>
04.04.001.104	<i>Procedure - Contract 31 Deliverables</i>
04.04.001.105	<i>Procedure – Graded Approach for Requirements and Documents</i>
04.04.001.106	<i>Procedure – Processing of Approved Contract 31 Changes</i>
04.04.001.107	<i>Procedure – Initiating a Change in Contract Requirements</i>
04.04.001.202	<i>Form – LBNL Implementation Plan Template</i>
04.04.001.201	<i>Form – Analyzing Requirements</i>
04.04.001.206	<i>Form –Significance Rating</i>
04.04.001.300	<i>Processes during Pre-Adoption of LBNL Requirements</i>
04.04.001.301	<i>Procedure – Impact Analysis for Proposed Contract 31 Changes</i>
04.04.001.004	<i>RMS Database Requirements Specification</i>

## 7. Contact

Email: requirementsmgmt@lbl.gov  
 Requirements Management Program Manager  
 LBNL Office of Contract Assurance

## 8. Revision History

Date	Revision	By whom	Revision Description	Sections affected
12/19/11	0.0	L.Young	Prepare for signoff and pre-release in OCA web	
7/26/14	1.0	L.Young	Align with current practice. Remove Policy Area Manager role; adjust roles, definitions. Add references. Add 5/14 Charter; remove PAM charter; WG chartering letter.	all

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**Appendix A: RMC Charter****CHARTER (May 2014)  
Lawrence Berkeley National Laboratory  
Requirements Management Committee**

**Purpose:** The Requirements Management Committee (RMC) is appointed by and reports to the Associate Laboratory Director of Operations/Chief Operations Officer (ALDO/COO), and collaborates with the Requirements Management Program Manager (RM PM) in the implementation and maintenance of a disciplined requirements system for the Lawrence Berkeley National Laboratory. The scope of its efforts relate to the management of all requirements determined applicable to LBNL pursuant to terms of the U. S. Department of Energy (DOE) Contract No. DE-AC02-05CH11231 (Contract 31) and any LBNL generated requirements, policies and institutional documents.

**Membership:**

The RMC is comprised of not more than fifteen nor less than ten members, and includes representatives from the Operations Functions, , Office of Contract Assurance (OCA), Technology Transfer, Research and Institutional Integrity Office (RIIO), Engineering, and Office of Laboratory Counsel. The COO nominates a chair from the RMC membership to serve for three years. Quorum for RMC meetings is based on a pre-meeting agenda and include at least the RMC chair, the RM PM, and representatives having a stake in the agenda items.

LBNL RMC members are nominated by their respective senior line managers, and appointed by the ALDO/COO. All members serve for a 3 year term, with possibility of extension.

Alternates to RMC members are nominated by respective senior line managers, and appointed by the ALDO/COO for a 3 year term. The requirement to nominate an alternate may be waived by the COO for the smaller divisions/offices. Alternates are expected to meet the qualifications of RMC members, and are expected to attend RMC monthly meetings whenever the regular RMC member cannot.

**Responsibilities of the Requirements Management Committee (RMC):**

- Provides centralized coordination and communications on Contract 31 requirements and related Lab policy matters.
- Reviews and oversees disposition of Requirements Review Cases<sup>1</sup> related to requirements, Laboratory policies, and on a case-by-case basis Laboratory implementing documents.
- Oversees the RM process to ensure that (a) changes to requirements, policies, programs are analyzed and assessed for impact and risks, including but not limited to considerations for cost, complexity, compliance, safety, degree of cross-functionality, level of effort to implement, and (b) implementation plans to incorporate any changes include identification of and communications to stakeholders, and (c) the records of change including supporting information are captured in the RMS database.
- Applies cross-functional knowledge on requirements and Lab policy matters.
  - Assesses the Laboratory wide impacts of proposed, new or changed requirements, and drives for a holistic response.
  - Reviews and recommends best qualified team members to address requirements analyses, implementation mechanisms and plans, policy and procedure documents.

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<sup>1</sup> “Requirements review case” is defined as: An instance or a question related to a requirement that has been logged into the Requirements Management database for disposition by the RM Committee.

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- Such team members include Working Group (WG) members and Subject Matter Experts (SME).
- Ensures teams are cross-functionally represented.
- Recommends collaboration with other Laboratory standing committees whenever possible.
- Reviews and applies cross-functional knowledge and judgment on WG and SME work products (analyses, implementation plans, policies).
  - Helps to ensure analyses and plans lead to practical (cost, breadth of impact, simplicity, etc.) implementation.
  - Checks that risk analysis and problem solving techniques and best practices have been applied.
- Makes recommendations to responsible Sr. Line Manager on WG and SME work products.
- Drives for process simplicity. Seek resolution and decision-making at the lowest levels possible. Review processes at least annually and make improvements for efficiency and effectiveness.
- Reviews communications plan to ensure effectiveness and thoroughness.
- Reports to ALDO/COO.
- Champions the applications of RM and institutional document management processes throughout the Laboratory.

### **RMC Chair:**

Nominated by ALDO/COO for a three year term. RM PM may be a viable candidate for the position.

#### Qualifications and responsibilities:

- Chairs the Requirements Management Committee (RMC), and generally ensures that the RMC fills its responsibilities (a) to ensure that new/changed requirements are appropriately reviewed, analyzed, and translated into LBNL policies and procedures, and (b) to review implementation plans supporting policy changes or introduction of policy for scope, comprehensiveness, and cross-functional balance.
- Prepares agenda for and leads RMC meetings.
- Facilitates communications among the RMC, Working Groups, Sr. Line Managers to ensure timely completion of requirements and policy matters. Drives for resolution of conflicts amongst these parties.
- Encourages RMC to apply broad knowledge of operations functions to ensure the quality, accuracy, efficiency and effectiveness of detailed recommendations generated by the RMC and the Working Groups.
- Coordinates the reviews and preliminary concurrence on institutional policies, and related interpretation and impact analyses and implementation plans recommended by Working Groups and the RMC.
- Serves as “second pair of eyes” (after RMC member review) to provide quality assurance review of Lab policies or requirement-related analyses. Reviews information with a cross-functional view and for consistency and completeness per RM program guidelines. Follows up with RMC member(s) as necessary to ensure written message is accurately communicated. May recommend and then assist facilitating additional inputs (RMC, respective Sr. Line Manager, other Laboratory standing committees, etc.)
- Manages the assignments of the Requirements and Policies Manual (RPM) editor, and with the assigned editor’s assistance is responsible for maintaining quality of the RPM.
- Oversees preparation by RMC of recommendations to the responsible Sr. Line Manager institutional policies and related implementation plans for final approval.
- Provides support as required to meet line management and/or policy Subject Matter Expert defined timing of communications on Laboratory requirements, policy and institutional document matters.
- Provides regular reports to the ALDO/COO. Provides courtesy updates to DOE Berkeley Site Office, UCOP, and Laboratory standing committees.
- With RMC members, feeds accurate and current information for the RMS database maintained by the RM PM.
- Is responsible for initiating process for replacing or renewing member appointments, if required.

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**RMC Member qualifications and responsibilities:**

LBNL members are nominated by respective senior line manager, appointed by ALDO/COO. All members serve for a 3 year term.

Qualifications

- Must have experience and breadth of knowledge of requirements, policies, and specific functional operation in his/her respective areas of expertise.
- Must have and apply good working knowledge and experience of general Laboratory operations.
- Must have skills and/or experience in translating requirements into practice (guidance or actions).
- Must be trained on LBNL RM and document management processes.
- Has good writing and communication skills.
- Has leadership and facilitator skills.
- Has the trust of his/her Sr. Line Manager to accept assignments or to make recommendations on behalf of his/her Division or Department or to judge when to seek guidance.
- Has skills and experience in risk analysis and problem solving techniques.

Responsibilities

- Within Division or Department (or functional assigned responsibility area), coordinates Division's or Department's responsibilities on requirements, contract deliverables, policy, and related institutional matters. Serves as the Division or Department expert on the institutional RM and document management processes. Applies and promotes the institutional RM and document management processes within the functional assigned responsibility area.
- Serves as the Division's or Department's point of contact to the Laboratory's Requirements Management Program as a member of the RMC.
- As delegated by his/her appointing Sr. Line Manager, has authority to accept RMC actions or assignments on behalf of his/her respective functional area.
- With support of the Sr. Line Manager, can assign policy/requirement-related tasks to divisional SMEs, and drive for completion. Typical tasks include application of expertise to analyze or interpret a DOE directive, Contract requirement, regulation, in terms of impact on institutional programs, processes, practices.
- Serves as "first pair of eyes" to provide quality assurance review of Lab policies or requirement-related analyses. Reviews information with a cross-functional view and for consistency and completeness per RM program guidelines. Follows up with SME or author as necessary to ensure written message is accurately communicated. May recommend and then assist facilitating additional inputs (RMC, respective Sr. Line Manager, other Laboratory standing committees, etc.)
- As a member of the RMC, actively participates in identifying, developing, supporting and improving the institutional RM processes. "Support" can include, for example, coaching/teaching others, demonstrating through practice, being an advocate, and so forth.
- Applies leadership and collaborative skills in working with SMEs, Working Group members, the RMC, other Laboratory standing committees. Champions, facilitates, and practices cross-functional collaboration.
- Consistently attends and participates at RMC meetings. If absence is necessary, is responsible for notifying Division's alternate.
- Communicates actions and/or assignments to respective Sr. Line Manager on regular basis.

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**RMC Member Alternates Qualifications and Responsibilities**

LBNL alternate members are nominated by respective senior line manager, appointed by ALDO/COO. All alternates serve for a 3 year term.

Qualifications

- Must have similar breadth of skills as RMC Members, but may be less experienced.

Responsibilities:

- Attend RMC meetings when regular RMC member must be absent. Participate fully in meeting discussions including reporting status on open cases, contributing to discussions, offering assistance/expertise where applicable.
- (Recommendation) Attend at least three RMC meetings within a calendar year. This primarily serves as an opportunity to (a) stay abreast of current cases, (b) increase knowledge of Lab operations, (c) increase knowledge of RM practices.

**Meetings:** The Requirements Management Committee meets at least monthly or as frequently as needed to take effective action on pending policy and related implementing documents. Meeting agendas are distributed at least one week in advance. Members who are unable to attend a meeting have responsibility for notifying his/her alternate. The RM PM records, communicates, and tracks actions, decisions, and/or recommendations to closure. The RMC Chairperson provides a report at least annually to the ALDO/COO.

**Support:**

- The Office of Institutional Assurance (OIA) provides administrative staff support as needed.
- The Creative Services Office provides editorial and publication support for the RPM (Policy Manual). OIA manages the budget for CSO services. RM Program Manager manages CSO assignments.
- IT-Business provides funding and system support for the RMS database.

**References:**

*LBNL Requirements Management Governance System Description, Doc # 04.04.001.002*

*LBNL Requirements Management Process Description, Doc # 04.04.001.003*

*LBNL Managing Institutional Documents Process Description, Doc # 10.06.001.001*