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ISO 55001 Alignment Rating		% Lagging Ratings	Gap Analysis Alignment Rating	IAM Maturity Rating	IAM Maturity Rating Definitions
Lagging		86.2%	Lagging	Maturity Level 0/1	
ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3	
4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.
5 Leadership	Lagging immediate attention required	95.2%			
6 Planning	Lagging immediate attention required	100.0%			
7 Support	Lagging immediate attention required	81.8%			
8 Operation	Lagging immediate attention required	85.7%			
9 Performance Evaluation	Lagging immediate attention required	100.0%			
10 Improvement	Lagging immediate attention NOT required	78.9%			

ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
4 Organization Context	4.1 Understanding the Org & Context	Pete	AM & Org Objectives/AM Policy	Pete	1	How does the organization determine external and internal issues relevant to its purpose that impact on its ability to achieve the intended outcomes of its asset management system?	4.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Aligning	Strategic Planners, Facility Area Managers, Engineering & Maintenance are engaged with Partners to determine asset requirements. Processes continue to be developed and documented to assure Partners requirements are understood and assets are acquired, sustained and positioned to meet Partners expectations and mission requirements, and maximize asset reliability and availability. Asset management information systems exist to capture asset inventory, condition, and sustainment needs. However, neither an asset management policy, strategic asset management plan (SAMP), nor asset management objectives exist to delineate asset management principles and expectations related to acquiring asset requirements.	There is no gap in terms of gathering information to drive the need for assets. However, the development of an asset management policy, asset management objectives, and a SAMP can provide clarity on requirements and roles and responsibilities relative to planning efforts.	Develop an Asset Management Policy, SAMP, and Asset Management Objectives and incorporate principles and expectations related to partner involvement in establishing asset requirements and roles and responsibilities.
4 Organization Context	4.1 Understanding the Org & Context	Pete	AM & Org Objectives/AM Policy	Pete	2	How does the organization ensure that asset management objectives are aligned with organizational objectives?	4.1	Asset management objectives are not aligned with organizational objects OR there are no asset management objectives.	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Lagging	Corporate Objectives are annually reviewed, and communicated to the department level to identify activities that align with both corporate and division level objectives. However, neither an asset management policy nor a strategic asset management plan (SAMP) exist to delineate asset management objectives requirements or to assure these objectives are aligned from the corporate to the department level.	The ISO 55001 gap is the absence of an asset management policy, asset management objectives, and a SAMP.	Develop an Asset Management Policy that includes provisions for asset management objectives requirements. Develop a SAMP that delineates responsibilities for the development of asset management objectives and alignment with corporate asset management objectives.
4 Organization Context	4.1 Understanding the Org & Context	Pete	AMP/LCAMP/SAMP/Org Plan - 4851	Gabe	1	How does the organization determine external and internal issues relevant to its purpose that impact on its ability to achieve the intended outcomes of its asset management system?	4.1	The organization has no / inadequate process(es) in place to enable it to determine internal and/or external issues that could impact on asset management outcomes.	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Aligning	Corporate Objectives are annually reviewed, and communicated to the department level to identify activities that align with both corporate and division level objectives. However, neither an asset management policy nor a strategic asset management plan (SAMP) exist to delineate asset management objectives requirements or to assure these objectives are aligned from the corporate to the department level.	Lack of an asset management policy and a strategic management plan, which would contain requirements, however the need has been identified, and progression is occurring evidenced by current LCAMP/SAMP efforts and this group's effort to standardize AMPs	The existing AMPs should be modified to align with the ISO requirements for Asset Management Framework. All future plans should align with this framework. Any organization or staff member that deals with AMPs should have some level of training to be made aware of the ISO requirements.
4 Organization Context	4.1 Understanding the Org & Context	Pete	AMP/LCAMP/SAMP/Org Plan - 4854	Diane	1	How does the organization determine external and internal issues relevant to its purpose that impact on its ability to achieve the intended outcomes of its asset management system?	4.1	The organization has no / inadequate process(es) in place to enable it to determine internal and/or external issues that could impact on asset management outcomes.	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Aligning	Asset funding needs are obtained by working with stakeholders, conducting condition assessments, and identifying maintenance requirements. Organizational Objectives are generally communicated. Recapitalization needs are captured in the BUILDER/G2 module and are prioritized via the Recapitalization, Restoration, Renovation and Sustainability (R ² S) process.	The gap is the lack of an asset management system as identified in Section 4.1.1.1. The current alignment of strategic investment does not necessarily coincide with overall organizational objectives. Decisions are silo-ed by division. There is not currently an organizational vision for investment, although, there is movement in that direction	Determine who the relevant Stakeholders are that have an interest in the information being developed in order to incorporate their input. Develop a cohesive scope and context for the Asset Management System. The scope should be aligned with the SAMP. Develop a Strategic Asset Management Plan and organizational objectives. We have pieces established that can contribute to establishing the SAMP and AMP but the information needs to be integrated to provide a useful model for all end users. It should also link to financial reports. I believe those are only currently generated during Deep Dives.
4 Organization Context	4.1 Understanding the Org & Context	Pete	Asset Management Context	John	2	How does the organization ensure that asset management objectives are aligned with organizational objectives?	4.1	Asset management objectives are not aligned with organizational objects OR there are no asset management objectives.	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Lagging	SNL has a multilevel planning process. The Corporation sets a Strategic Direction, then develops Goals and Objectives for each FY that help to implement the direction. These objectives flow down to the Division strategic plans, then to the Center strategic plans for implementation at the department level. Division and Center objectives must align with one of the corporate objectives/milestones. However, the corporate objectives only address asset management obliquely, and this is reflected in the Division and Center plans. While some of these objectives address asset management, they are specific to one phase of the asset management process (construction, maintenance) and do not address asset management as a whole.	GAP: SNL does not have management objectives addressing the full breadth of the asset management process required by ISO 55001. These objectives must align with Corporate objectives.	Develop an Asset Management Policy and Strategic Asset Management Plan that includes asset management objectives that align with Corporate objectives.
4 Organization Context	4.1 Understanding the Org & Context	Pete	Culture	Pete	1	How does the organization determine external and internal issues relevant to its purpose that impact on its ability to achieve the intended outcomes of its asset management system?	4.1	The organization has no / inadequate process(es) in place to enable it to determine internal and/or external issues that could impact on asset management outcomes.	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Aligning	Executive Order 13327, DOE Order 430.1C, NNSA Supplemental Directive 430.1 and the Contactor's Requirements Document (CRD), the NA-50 Real Property Asset Management, the SNL Prime Contract, and SNL Policy FAC005 collectively outline the requirements and guidance to perform asset management. The leadership message consistent with these requirement/guidance documents is that SNL will be postured to assure capabilities exist to support the mission. Moreover, leadership has instilled a workplace environment such that everyone has flexibility to voice and pursue creative ideas that this support this goal and enable success. However, aside from these directive/guidance documents and SNL Leadership, SNL has neither a specific policy nor objectives specific to asset management that would instill a culture aligned with corporate strategies and leadership expectations related to asset management.	The ISO 55001 gap is the absence of an asset management policy, asset management objectives, and a SAMP.	Modify the Corporate, Division, and Center specific Strategic Plans to explicitly communicate asset management overarching expectations. Develop an Asset Management Policy, SAMP, and Asset Management Objectives.
4 Organization Context	4.1 Understanding the Org & Context	Pete	Data/Process Documentation	John	1	How does the organization determine external and internal issues relevant to its purpose that impact on its ability to achieve the intended outcomes of its asset management system?	4.1	The organization has no / inadequate process(es) in place to enable it to determine internal and/or external issues that could impact on asset management outcomes.	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Aligning	While SNL does have methods in place to identify internal and external issues that might affect our mission, this flows down to asset management in an inconsistent manner. Division Facilities and Infrastructure Plans used to improve this communication by identifying assets needed to meet new and changing missions, but they are no longer used. Process PCS-029, Engage Customer and Identify Needs (Division F&I Plans) has not been updated since 2015. Thus, while 4800 has identified this need, it has not developed a systematic approach to addressing issues that affect the entire asset management system. Planning is inconsistent across divisions, and collaboration across divisions needs to be improved.	GAP: Facilities does not have a holistic approach to asset management and thus has difficulty identifying issues that may affect the asset management system.	Develop an Asset Management Policy that includes a holistic approach to asset management that includes identifying issues that may affect the asset management system.
4 Organization Context	4.1 Understanding the Org & Context	Pete	Data/Process Documentation	John	2	How does the organization ensure that asset management objectives are aligned with organizational objectives?	4.1	Asset management objectives are not aligned with organizational objects OR there are no asset management objectives.	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Lagging	SNL has a multilevel planning process that is well documented. The Corporation sets a Strategic Direction, then develops Goals and Objectives for each FY that help to implement the direction. These objectives flow down to the Division strategic plans, then to the Center strategic plans for implementation at the department level. Division and Center objectives must align with one of the corporate objectives/milestones. However, the corporate objectives only address asset management obliquely, and this is reflected in the Division and Center plans. While some of these objectives address asset management, they are specific to one phase of the asset management process (construction, maintenance) and do not address asset management as a whole.	GAP: SNL has not documented management objectives that address the full breadth of the asset management process required by ISO 55001. These objectives must align with Corporate objectives.	Document an Asset Management Policy and Strategic Asset Management Plan that includes asset management objectives that align with Corporate objectives.
4 Organization Context	4.1 Understanding the Org & Context	Pete	Leadership & Commitment	Chris	1	How does the organization determine external and internal issues relevant to its purpose that impact on its ability to achieve the intended outcomes of its asset management system?	4.1	The organization has no / inadequate process(es) in place to enable it to determine internal and/or external issues that could impact on asset management outcomes.	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Aligning	The organization has an incomplete process to determine external and internal issues that impact its ability to achieve the intended outcome of its asset management system. The asset management program does not have a SAMP, there is not a consistent method utilized to evaluate and assess assets, and the program is not fully understood throughout the facilities organization.	The organization does not have a robust, complete program to adequately assess assets; and there is no SAMP to fully document the program.	Create a SAMP.
4 Organization Context	4.1 Understanding the Org & Context	Pete	Leadership & Commitment	Chris	2	How does the organization ensure that asset management objectives are aligned with organizational objectives?	4.1	Asset management objectives are not aligned with organizational objects OR there are no asset management objectives.	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Lagging	The organization does not have a documented process to ensure that the asset management objectives are aligned with the organizational objectives. An asset management department exists, along with activities that manage assets, but a SAMP does not exist, and it is not clear that the management objectives align with the organizational activities.	A SAMP is necessary to align the objectives	Create a SAMP.



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9 Performance Evaluation	Lagging immediate attention required	100.0%
10 Improvement	Lagging immediate attention NOT required	78.9%


Gap Analysis Alignment Rating	IAM Maturity Rating	IAM Maturity Rating Definitions
Lagging	Maturity Level 0/1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.
Aligning	Maturity Level 2/3	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.
Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.

ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging	Aligning	Leading	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
								(IAM) Maturity Level 0/1	(IAM) Maturity Level 2/3	(IAM) Maturity Level 3/4				
4 Organization Context	4.2 Understanding needs & expectations	Pete	AM & Org Objectives/AM Policy	Pete	4	How are stakeholder requirements determined for recording of financial and non-financial information relevant to asset management and reporting on this information internally and externally?	4.2	Requirements for reporting financial and non-financial information to stakeholders are not identified or reporting is not done.	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Aligning	Asset funding needs are obtained by working with stakeholders, conducting condition assessments to determine deferred maintenance and repair needs, and new assets. Recaptitalization needs are captured in the BUILDER/G2 module and are prioritized via the Recaptitalization, Restoration, Renovation and Sustainability (R ² S) process.	No Gap	No Gap
4 Organization Context	4.2 Understanding needs & expectations	Pete	Asset Scope/Portfolio Requirements	Waylon	5	How does the organisation determine the criteria for asset management decision making?	4.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organisation determines criteria for asset management decision making which includes where appropriate consultation with relevant stakeholders.	Lagging	While there are mechanisms to gather input from internal and external stakeholders there is no formal criteria or central body that makes asset management decisions. With the lack of an Asset Management Policy there are only some very broad scopes for roles and responsibilities in a myriad of policies and procedures; in general, Center 4700 is responsible for maintaining assets, Center 4800 is responsible for the capital replacement/new installation planning decision of assets based on internal/external stakeholder needs	Lack of an Asset Management System Policy that clearly defines the input requirements for asset management decisions	Create an Asset Management Policy
4 Organization Context	4.2 Understanding needs & expectations	Pete	Leadership & Commitment	Chris	3	How does the organization identify and determine the needs and expectations of stakeholders	4.2	The organization has not identified relevant stakeholders or their needs in considering its asset management system OR the organization does not have an asset management system	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Aligning	The organization does have multiple methods to understand the needs of the stakeholders. This is accomplished through our Facilities Area Management (FAM) teams/departments and our Strategic Planning departments. The process to establish asset management decisions does exist, but it is not fully understood, or clearly documented (I need to verify this with William Tierney, and others.)	The only gap is a SAMP, which is necessary to tie the needs of the stakeholders to ISO	Create a SAMP.
4 Organization Context	4.3 Determining Scope of the AMS	Pete	AM & Org Objectives/AM Policy	Pete	6	How has the organisation determined the boundaries and applicability of the asset management system in order to establish and document its scope?	4.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The scope of the asset management system is clearly documented in terms of its boundaries, applicability, interfaces with other management systems and the asset portfolio covered. The scope of AMS is aligned with the SAMP, the asset management policy, and takes account of relevant internal and external issues and needs and expectations of stakeholders.	Lagging	The term Asset Management System is not a term used by those managing assets and SNL. However, an organization structure does exist to manage assets and is generally aligned by planning and execution functions. The scope of the asset management departmental responsibilities are generally documented but lacks specificity which can lead ambiguity of roles & responsibilities, unclear direction, and lack of accountability.	The ISO 55001 gap is the absence of SAMP.	Develop an SAMP that delineates roles and responsibilities for asset management.
4 Organization Context	4.3 Determining Scope of the AMS	Pete	AMP/LCAMP/SAMP/Org Plan - 4851	Gabe	6	How has the organisation determined the boundaries and applicability of the asset management system in order to establish and document its scope?	4.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The scope of the asset management system is clearly documented in terms of its boundaries, applicability, interfaces with other management systems and the asset portfolio covered. The scope of AMS is aligned with the SAMP, the asset management policy, and takes account of relevant internal and external issues and needs and expectations of stakeholders.	Lagging	The term Asset Management System is not really part of the SNL asset management vocabulary. However, an organization structure does exist to assure assets are managed and is generally aligned by planning and execution functions. The scope of the asset management responsibilities are generally documented but lacks specificity which leads to ambiguity of roles & responsibilities, unclear direction, and lack of accountability.	No structured Asset Management System that sets boundaries and the scope of asset management. The Asset Management system should include requirements, boundaries, and specific function of asset management to direct how assets are managed.	Create a process that sets the boundaries of asset management. This process should document the scope of how asset management is executed. This plan will be a framework to help systematically achieve the goals as determined by the scope of the process.
4 Organization Context	4.3 Determining Scope of the AMS	Pete	AMP/LCAMP/SAMP/Org Plan - 4854	Diane	6	How has the organisation determined the boundaries and applicability of the asset management system in order to establish and document its scope?	4.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The scope of the asset management system is clearly documented in terms of its boundaries, applicability, interfaces with other management systems and the asset portfolio covered. The scope of AMS is aligned with the SAMP, the asset management policy, and takes account of relevant internal and external issues and needs and expectations of stakeholders.	Lagging	The organization has not determined the boundaries and applicability of the asset management system at this time. There are incremental steps being made, by various groups and through various mechanisms, to consolidate information. LCAMPs, for instance, have been identified as a potential means of consolidating asset/system information but the applicability has not necessarily been communicated thoroughly. The framework and reporting is still evolving. Area Plans are developing but will be largely lead by NSNA in terms of how they are structured and what information will be represented. NSNA is continuing to hone in on the framework. Area Plans are only in their infancy in terms of progress. Consolidation of corporate need is also still in development. The creation of a "One List" is still in development as a means of generating organizational/corporate objectives rather than individual division needs.	The gap is the lack of a scope for the asset management system. This group is working toward identifying that scope. The interdependencies have also not been fully identified	Identify interdependencies - for instance, we segregate infrastructure by internal and external to the building. How can we integrate use, age replacement and capacity analysis? The information is not integrated in a single location. Without a scope and SAMP, these assets and their independent management will continue to not have integrated information. The boundaries of the asset management system need to be established.
4 Organization Context	4.3 Determining Scope of the AMS	Pete	Asset Scope/Portfolio Requirements	Waylon	6	How has the organisation determined the boundaries and applicability of the asset management system in order to establish and document its scope?	4.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The scope of the asset management system is clearly documented in terms of its boundaries, applicability, interfaces with other management systems and the asset portfolio covered. The scope of AMS is aligned with the SAMP, the asset management policy, and takes account of relevant internal and external issues and needs and expectations of stakeholders.	Lagging	The scope of an Asset Management Plan has not been identified. The boundaries between assets is constantly evolving; a common framework (PIE Program) is still in progress to implement site-wide that will make that determination easier but it has not been fully deployed nor will it address all assets.	Lack of an Asset Management System with a clearly defined scope	Create an Asset Management System and Policy with clearly defined scope as there has historically been a lot of disagreement and divergent opinions of who is "responsible" (from both a financial and execution standpoint) for which assets
4 Organization Context	4.3 Determining Scope of the AMS	Pete	Data/Process Documentation	John	6	How has the organisation determined the boundaries and applicability of the asset management system in order to establish and document its scope?	4.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The scope of the asset management system is clearly documented in terms of its boundaries, applicability, interfaces with other management systems and the asset portfolio covered. The scope of AMS is aligned with the SAMP, the asset management policy, and takes account of relevant internal and external issues and needs and expectations of stakeholders.	Lagging	Different pieces of the asset management system (CAS, D&D, construction) are documented in different plans, but there is no overall asset management plan that discusses the overall system. Therefore, the boundaries and applicability are not fully documented.	GAP: Facilities does not have a comprehensive asset management plan, nor has SNL determined the boundaries and applicability of an asset management system.	Develop an Asset Management Policy and SAMP with clearly identified boundaries for the asset management system.
4 Organization Context	4.3 Determining Scope of the AMS	Pete	Leadership & Commitment	Chris	6	How has the organisation determined the boundaries and applicability of the asset management system in order to establish and document its scope?	4.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The scope of the asset management system is clearly documented in terms of its boundaries, applicability, interfaces with other management systems and the asset portfolio covered. The scope of AMS is aligned with the SAMP, the asset management policy, and takes account of relevant internal and external issues and needs and expectations of stakeholders.	Lagging	The organization utilizes PLN-Q22 to document the boundaries and scope of the asset management system. The plan documents the process for assessing assets but does not document aspects such as the re-capitalization process. Also, a SAMP does not exist, which would clearly determine the boundaries.	A SAMP is necessary to tie all of the other documents together and fully document the scope of the asset management program	Create a SAMP.
4 Organization Context	4.4 AMS - Asset Management System	Pete	AMP/LCAMP/SAMP/Org Plan - 4851	Gabe	7	What has the organisation done to establish, implement, maintain and continually improve an asset management system?	4.4	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established an asset management system , documenting as appropriate, the various components required for people, process, information, technology and with appropriate linkages to other organizational functions and management systems.	Lagging	While there are various AMPs (such as LCAMPs, CHAMP, RAMP, etc.), and more being developed, which serves as evidence to progress, there isn't an established way to implement and maintain and continually improve on the asset management system. This is part of what this group is looking to accomplish.	No formal management system that exists to systematically approach asset management, including the ability to maintain and improve the asset management system, such as a PCD document or a working plan that gets reviewed annually.	There should be established an asset management system, which has documented components about how to create, change, and maintain asset management plans. A management system should be in place (such as occasional review of the plan, signoff form management, etc.). The system should include a systematic way to make changes to the plan.

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	Lagging		86.2%	Lagging	Maturity Level 0/1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.								
	ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.								
	4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.								
	5 Leadership	Lagging immediate attention required	95.2%											
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ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
4 Organization Context	4.4 AMS - Asset Management System	Pete	AMP/LCAMP/SAMP/Org Plan - 4854	Diane	7	What has the organisation done to establish, implement, maintain and continually improve an asset management system?	4.4	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established an asset management system , documenting as appropriate, the various components required for people, process, information, technology and with appropriate linkages to other organizational functions and management systems.	Lagging	The organization has identified the need to create an asset management system. Various groups have started to gather inventory of their systems through the form of an LCAMP. This data is collected via the various databases and resources including institutional knowledge, System Sustainment Plans, ProjectWise for drawings, Maximo for assets, BUILDER, CAIS, FIMS. The information collected is not necessarily consistent across the disciplines nor does there seem to be much collaboration or integration. Our group is also in the process of providing the initial review of our current processes against the ISO 555001 requirements. Steps forward.	We need to establish and implement the, asset management system. Clear asset management objectives need to developed and roles identified for staff, inclusive of integration procedures. Per section 4.4: "An appropriate starting point is the establishment of an asset management policy which often helps to provide focus for the organization and to identify its intentions. Following this, the organization should develop a SAMP."	The organization has taken the step forward to identify the need for an Asset Management Plan. This effort will outline our progress to establish, implement, maintain and improve the system. We need a much more detailed look into what current individual "Asset Management Systems" exist and establish linkages/interdependencies. We need to be able to further integrate the information to develop data regarding processes, maintenance activities, quality and long-term financial plans.
4 Organization Context	4.4 AMS - Asset Management System	Pete	Data/Process Documentation	John	8	How does the organization develop, update and document its SAMP?	4.4	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has a SAMP , which is derived from its organizational plan, and is aligned with this plan, the AM policy and the scope of the AM system. The SAMP documents: - the asset management objectives; - the role of the asset management system in achieving the asset management objectives.	Lagging	As discussed, different pieces of the asset management system (CAS, D&D, construction) are documented in different plans, but there is no overall asset management plan that discusses the overall system. This gap analysis indicates Facilities' interest in establishing such a plan, but it is not under development. Once Facilities decides to develop a SAMP, resources are available in Department 4801, Strategic and Technical Operations, to prepare and update the plan.	GAP: Facilities does not have a comprehensive SAMP that meets the requirements of ISO 55001.	Develop the AMP and SAMP using the existing 4800 document management system in Department 4801. Use existing processes and resources to keep the plan updated.
4 Organization Context	4.4 AMS - Asset Management System	Pete	Integrated Asset Management	Birgitta	7	What has the organisation done to establish, implement, maintain and continually improve an asset management system?	4.4	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established an asset management system , documenting as appropriate, the various components required for people, process, information, technology and with appropriate linkages to other organizational functions and management systems.	Lagging	4700/4800 Mgt System, consisting of Directors, Sr Mgrs and their departments, establishes policies, objectives, and processes to align Org and Division goals to achieve Corporate objectives. The Mgt System currently does not have a set of AM objectives to implement a formal Asset Mgt System (AMS). However, Sr Mgt has identified the need and asked 4853 with evaluating current AM processes against ISO 55001 requirements as an initial step in establishing AMS.	The Organization (4000 Facilities) has not established any formal Asset Management (AM) objectives and policies needed to implement, maintain, and continually improve Asset Mgt System (AMS).	When 4000 establishes annual Division and Center Strategic plans to achieve Corporate goals and objectives, they should address the need to establish and incorporate formal Facilities Asset Management objectives, policies, and goals into these annual plans.
5 Leadership	5.1 Leadership & Commitment	Chris	AM & Org Objectives/AM Policy	Pete	9	How has top management demonstrated leadership and commitment in relation to the asset management system?	5.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Top management ensured that the asset management policy, the SAMP and asset management objectives are all in place and are consistent with the organizational objectives The asset management system is fully integrated with the organization's business processes. The approach used for managing asset management related risk is aligned with the organization's risk management approach. Top management can provide evidence of the following: ~ resources are made available for the asset management system. ~ the importance of meeting asset management requirements has been communicated to the organization. ~ the asset management system fulfils its intended outcome(s). ~ direction and support is provided to other management roles.	Lagging	Leadership conveys it's asset management commitment through Corporate and Organizational Objectives, Division and Center Vision & Mission Statements, and Group and Department functional statements. However, neither an Asset Management Policy, a SAMP, nor Asset Management Objectives exist to drive asset management expectations and culture.	The ISO 55001 gap is the absence of an asset management policy, asset management objectives, and a SAMP.	Develop an Asset Management Policy, SAMP, and Asset Management Objectives and incorporate principles and expectations demonstrating a commitment to asset management.
5 Leadership	5.1 Leadership & Commitment	Chris	AM Performance Monitoring & Evaluation	Waylon	9	How has top management demonstrated leadership and commitment in relation to the asset management system?	5.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Top management ensured that the asset management policy, the SAMP and asset management objectives are all in place and are consistent with the organizational objectives The asset management system is fully integrated with the organization's business processes. The approach used for managing asset management related risk is aligned with the organization's risk management approach. Top management can provide evidence of the following: ~ resources are made available for the asset management system. ~ the importance of meeting asset management requirements has been communicated to the organization. ~ the asset management system fulfils its intended outcome(s). ~ direction and support is provided to other management roles.	Lagging	There is currently no Asset Management Policy and/or system that leadership can demonstrate a commitment to. In addition, Asset Management is term that has only recently made it into one area of the Divisional objectives and hasn't been recognized at a Corporate level as something to implement as a goal.	Lack of an Asset Management System Policy	Create an Asset Management Policy that is endorsed, supported and a requirement from executive leadership with measurable objectives and goals
5 Leadership	5.1 Leadership & Commitment	Chris	AMP/LCAMP/SAMP/Org Plan - 4854	Diane	9	How has top management demonstrated leadership and commitment in relation to the asset management system?	5.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Top management ensured that the asset management policy, the SAMP and asset management objectives are all in place and are consistent with the organizational objectives The asset management system is fully integrated with the organization's business processes. The approach used for managing asset management related risk is aligned with the organization's risk management approach. Top management can provide evidence of the following: ~ resources are made available for the asset management system. ~ the importance of meeting asset management requirements has been communicated to the organization. ~ the asset management system fulfils its intended outcome(s). ~ direction and support is provided to other management roles.	Lagging	The organization has identified the commitment to asset management, the maturity level is challenged by the ability to consistently achieve the requirements and that credible resources are in place. There is inconsistent opinion as to the value of things such as LCAMPs and therefore it is difficult to assess the credibility of the information. Management has recognized the need to create Area Plans for the purposes of requesting funding that aligns with our asset needs. The format has only recently been communicated to SNL so the Area Plans are in the early stages of development. Management has assigned Pete the responsibility to oversee development of the asset management system, however, there has not ben any acknowledgement, that I'm aware of, that ownership and accountability remains at the top management level.	Section 5.1 b-k as part of addressing the gap (i.e. decision making criteria, establishment of priorities and objectives, allocation of resources, etc). 4800 has taken the initial step of referencing asset management in our organizational objective.	Development of the Asset Management Plan (inclusive of the SAMP, objectives, resources, decision making criteria, etc). Top Management will need to recognize this effort as a future determining factor for prioritized financial investment. They have recognized a need but a significant amount of support is needed to develop the integration needed.

<div></div> <div></div>	ISO 55001 Alignment Rating		% Lagging Ratings	Gap Analysis Alignment Rating	IAM Maturity Rating		IAM Maturity Rating Definitions						
	Lagging		86.2%	Lagging	Maturity Level 0/1		The organization has identified the need for this requirement, and there is evidence of intent to progress it.						
	ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3		The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.						
	4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4		The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.						
	5 Leadership	Lagging immediate attention required	95.2%										
	6 Planning	Lagging immediate attention required	100.0%										
	7 Support	Lagging immediate attention required	81.8%										
	8 Operation	Lagging immediate attention required	85.7%										
	9 Performance Evaluation	Lagging immediate attention required	100.0%										
	10 Improvement	Lagging immediate attention NOT required	78.9%										

ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
5 Leadership	5.1 Leadership & Commitment	Chris	Continuous Improvement	Birgitta	9	How has top management demonstrated leadership and commitment in relation to the asset management system?	5.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Top management ensured that the asset management policy, the SAMP and asset management objectives are all in place and are consistent with the organizational objectives The asset management system is fully integrated with the organization's business processes. The approach used for managing asset management related risk is aligned with the organization's risk management approach. Top management can provide evidence of the following: ~ resources are made available for the asset management system. ~ the importance of meeting asset management requirements has been communicated to the organization. ~ the asset management system fulfils its intended outcome(s). ~ direction and support is provided to other management roles.	Lagging	Since there is no formal AMS in place, Sr Mgt has identified the need and asked 4853 to establish an AM working group to review the organization's current processes against requirements of ISO 55001 and determine the gap areas to be developed in support a formal asset management system, including continuous improvement process.	No formal AMS exists for top mgt to demonstrate leadership/commitment for continuous improvement	Once 4000 Division and Centers incorporates the Asset Management (AM) objectives, policies, and goals in their annual Strategic Plans, top mgt can demonstrate their commitment to the AM System by moving forward with the development of a 4000 Strategic AM Plan (SAMP) and Center AM Plans (AMPs) which should include a continuous improvement process.
5 Leadership	5.1 Leadership & Commitment	Chris	Integrated Asset Management	Birgitta	9	How has top management demonstrated leadership and commitment in relation to the asset management system?	5.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Top management ensured that the asset management policy, the SAMP and asset management objectives are all in place and are consistent with the organizational objectives The asset management system is fully integrated with the organization's business processes. The approach used for managing asset management related risk is aligned with the organization's risk management approach. Top management can provide evidence of the following: ~ resources are made available for the asset management system. ~ the importance of meeting asset management requirements has been communicated to the organization. ~ the asset management system fulfils its intended outcome(s). ~ direction and support is provided to other management roles.	Lagging	Since there is no formal AMS in place, Sr Mgt has identified the need and asked 4853 to establish an AM working group to review the organization's current processes against requirements of ISO 55001 and determine the gap areas to be developed in support a formal asset management system.	No formal AMS exists for top mgt to demonstrate leadership/commitment for integrated AM.	Once 4000 Division and Centers incorporates the AM objectives, policies, and goals in their annual Strategic Plans, top mgt can demonstrate their commitment to the AM System by moving forward with the development of a 4000 Strategic AM Plan (SAMP). The SAMP should layout the plans for an Integrated Management approach, using existing Mgt systems/processes (e.g. ES&H) for dealing with nonconformities and incidents with assets and the AM System.
5 Leadership	5.1 Leadership & Commitment	Chris	Leadership & Commitment	Chris	9	How has top management demonstrated leadership and commitment in relation to the asset management system?	5.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Top management ensured that the asset management policy, the SAMP and asset management objectives are all in place and are consistent with the organizational objectives The asset management system is fully integrated with the organization's business processes. The approach used for managing asset management related risk is aligned with the organization's risk management approach. Top management can provide evidence of the following: ~ resources are made available for the asset management system. ~ the importance of meeting asset management requirements has been communicated to the organization. ~ the asset management system fulfils its intended outcome(s). ~ direction and support is provided to other management roles.	Lagging	Management has demonstrated leadership by creating an asset management department, a plan to assess assets, and a method to re-capitalize assets. Documentation, such as a SAMP is lacking, plus there is not a clear understanding throughout the organization regarding the process to re-capitalize assets.	The main gap is the lack of a document, the SAMP, to pull the program together	Create a SAMP.
5 Leadership	5.1 Leadership & Commitment	Chris	Resources/Roles & Responsibilities	Jeremy	9	How has top management demonstrated leadership and commitment in relation to the asset management system?	5.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Top management ensured that the asset management policy, the SAMP and asset management objectives are all in place and are consistent with the organizational objectives The asset management system is fully integrated with the organization's business processes. The approach used for managing asset management related risk is aligned with the organization's risk management approach. Top management can provide evidence of the following: ~ resources are made available for the asset management system. ~ the importance of meeting asset management requirements has been communicated to the organization. ~ the asset management system fulfils its intended outcome(s). ~ direction and support is provided to other management roles.	Lagging	Corporate Objectives are reviewed annually and communicated outward from leadership. Our division has a processes through which the various levels of leadership provided input into the objectives for the Division that align with the Corporate Objectives. Objectives that are identified receive stronger support than other activities. Asset management is supported to ensure compliance with the prime contract; however, there is not a strong corporate policy to asset management across the corporation. There is not a consistent approach to asset management, and the principles of asset management are not always leveraged in decision making, or the allocation of resources across the organization.	The ISO 55001 gap is the absence of an asset management policy, and the resources necessary to develop a cross functional working asset mangement sysetm across the organization.	Support for an asset management policy at the coporate level with annual objectives to develop/improve our asset management system would help close this gap.


	ISO 55001 Alignment Rating		% Lagging Ratings	Gap Analysis Alignment Rating	IAM Maturity Rating		IAM Maturity Rating Definitions							
	Lagging		86.2%	Lagging	Maturity Level 0/1		The organization has identified the need for this requirement, and there is evidence of intent to progress it.							
	ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3		The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.							
	4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.								
	5 Leadership	Lagging immediate attention required	95.2%											
	6 Planning	Lagging immediate attention required	100.0%											
	7 Support	Lagging immediate attention required	81.8%											
	8 Operation	Lagging immediate attention required	85.7%											
	9 Performance Evaluation	Lagging immediate attention required	100.0%											
	10 Improvement	Lagging immediate attention NOT required	78.9%											
ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
5 Leadership	5.1 Leadership & Commitment	Chris	Risk Management - 4851	Gabe	9	How has top management demonstrated leadership and commitment in relation to the asset management system?	5.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Top management ensured that the asset management policy, the SAMP and asset management objectives are all in place and are consistent with the organizational objectives The asset management system is fully integrated with the organization's business processes. The approach used for managing asset management related risk is aligned with the organization's risk management approach. Top management can provide evidence of the following: ~ resources are made available for the asset management system. ~ the importance of meeting asset management requirements has been communicated to the organization. ~ the asset management system fulfills its intended outcome(s). ~ direction and support is provided to other management roles.	Lagging	Facilities has identified the need to approach asset management from a risk management standpoint, making sure to include risk management in all asset management plans. While there is an approach laid out in existing asset management plans, there is still a need to implement the Plan Do Check Act (PDCA) ISO cycle of Risk Management. This should be done using ISO 31000 as guidance on implementing a structured risk management program for asset management. Upper management has recognized a need to utilize risk management, and there is intent to progress on in, but have not found a structured framework as of yet.	The Asset Management Policy/System, signed off by top management that approaches asset risk management systematically. A system where top management can provide resources for the system, communication of the importance of asset management, verification that the asset management system is aligning to corporate objectives, and continued direction on asset management system improvement.	Continue the development of standardized Asset Management frameworks. There should be a single plan that any AMP can be developed from. Top management should provide input as it relates to business practices and corporate objectives.
5 Leadership	5.1 Leadership & Commitment	Chris	Risk Management - 4854	Diane	9	How has top management demonstrated leadership and commitment in relation to the asset management system?	5.1	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Top management ensured that the asset management policy, the SAMP and asset management objectives are all in place and are consistent with the organizational objectives The asset management system is fully integrated with the organization's business processes. The approach used for managing asset management related risk is aligned with the organization's risk management approach. Top management can provide evidence of the following: ~ resources are made available for the asset management system. ~ the importance of meeting asset management requirements has been communicated to the organization. ~ the asset management system fulfills its intended outcome(s). ~ direction and support is provided to other management roles.	Lagging	Same as above	Same as above	Development of the Asset Management Plan (inclusive of the SAMP, objectives, resources, decision making criteria, etc). Top Management will need to recognize this effort as a future determining factor for prioritized financial investment. They have recognized a need but a significant amount of support is needed to develop the integration needed.	
5 Leadership	5.2 Policy	Chris	AM & Org Objectives/AM Policy	Pete	10	What has top management done to establish, communicate, implement, periodically review and, if required, update an asset management policy?	5.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented asset management policy , which is authorized by top management and communicated within the organization and is available to relevant stakeholders. The asset management policy: - Is appropriate to the purpose of the organization; - Provides a framework for setting objectives; - Includes commitment to satisfy applicable requirements; - Includes commitment to continuously improve the asset management system. The asset management policy is documented, communicated, available and visible to all who are responsible for asset management activities, and reviewed regularly. The asset management policy references the organizational plan and how asset management will be used to enable it, and clearly states its relation and alignment with other organizational	Lagging	An asset management policy does not exist.	The ISO 55001 gap is the absence of an asset management policy.	Develop an Asset Management Policy and communication strategy to communicate the expectations and principles of the policy.
5 Leadership	5.2 Policy	Chris	AMP/LCAMP/SAMP/Org Plan - 4851	Gabe	10	What has top management done to establish, communicate, implement, periodically review and, if required, update an asset management policy?	5.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented asset management policy , which is authorized by top management and communicated within the organization and is available to relevant stakeholders. The asset management policy: - Is appropriate to the purpose of the organization; - Provides a framework for setting objectives; - Includes commitment to satisfy applicable requirements; - Includes commitment to continuously improve the asset management system. The asset management policy is documented, communicated, available and visible to all who are responsible for asset management activities, and reviewed regularly. The asset management policy references the organizational plan and how asset management will be used to enable it, and clearly states its relation and alignment with other organizational	Lagging	The need has been identified to develop an Asset Management Policy. The Asset Management Architecture group is the primary source of developing this policy. From here, the policy will drive asset management plans and will be periodically reviewed by management. What lacks is a documented, standardized and systematic approach via documentation and formal reviews.	The Asset Management policy has not had input into the formation of the policy, though they are aware of it. Once the policy is in place, top management should communicate their ongoing support of the policy as it relates to corporate objectives.	A documented asset management policy should be created. The policy is what drives the rest of the asset management system. Top management should be aware of and review this policy, and they should approve it. The policy should be communicated with all relevant stakeholders.



ISO 55001 Alignment Rating		% Lagging Ratings	Gap Analysis Alignment Rating	IAM Maturity Rating	IAM Maturity Rating Definitions	
Lagging		86.2%	Lagging	Maturity Level 0/1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	
ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	
4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.	
5 Leadership	Lagging immediate attention required	95.2%				
6 Planning	Lagging immediate attention required	100.0%				
7 Support	Lagging immediate attention required	81.8%				
8 Operation	Lagging immediate attention required	85.7%				
9 Performance Evaluation	Lagging immediate attention required	100.0%				
10 Improvement	Lagging immediate attention NOT required	78.9%				

								Lagging	Aligning	Leading	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	(IAM) Maturity Level 0/1	(IAM) Maturity Level 2/3	(IAM) Maturity Level 3/4				
5 Leadership	5.2 Policy	Chris	AMP/LCAMP/SAMP/Org Plan - 4854	Diane	10	What has top management done to establish, communicate, implement, periodically review and, if required, update an asset management policy?	5.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented asset management policy , which is authorized by top management and communicated within the organization and is available to relevant stakeholders. The asset management policy: - Is appropriate to the purpose of the organization; - Provides a framework for setting objectives; - Includes commitment to satisfy applicable requirements; - Includes commitment to continuously improve the asset management system. The asset management policy is documented, communicated, available and visible to all who are responsible for asset management activities, and reviewed regularly. The asset management policy references the organizational plan and how asset management will be used to enable it, and clearly states its relation and alignment with other organizational	Lagging	The need has been identified to develop an Asset Management Policy. Since the development is in its infancy, leadership has not developed a firm policy or communicated it to staff. Leadership supports the effort to move toward developing an asset management policy.	The asset management policy has not been authorized by top management yet but they are in support of developing a policy. The policy does not formally exist. We do have portions of the guiding principles that could be incorporated into the formal asset management policy, such as, 5.2 b and pieces of 5.2 d	They have recognized a need but a significant amount of support is needed to develop the integration needed. Development of the Asset Management Plan (inclusive of the SAMP, objectives, resources, decision making criteria, etc) is necessary. Top Management will need to recognize this effort as a future determining factor for prioritized financial investment. All Stakeholders need to understand the intentional, developed format and reporting for the overall function of the Asset Management Program. Once established, Top Management will need to provide input into the continued development and objectives established by the AMP. As leadership and mission evolves, the objectives will also change so a solidified process for timely management review is necessary.
5 Leadership	5.2 Policy	Chris	Asset Scope/Portfolio Requirements	Waylon	10	What has top management done to establish, communicate, implement, periodically review and, if required, update an asset management policy?	5.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented asset management policy , which is authorized by top management and communicated within the organization and is available to relevant stakeholders. The asset management policy: - Is appropriate to the purpose of the organization; - Provides a framework for setting objectives; - Includes commitment to satisfy applicable requirements; - Includes commitment to continuously improve the asset management system. The asset management policy is documented, communicated, available and visible to all who are responsible for asset management activities, and reviewed regularly. The asset management policy references the organizational plan and how asset management will be used to enable it, and clearly states its relation and alignment with other organizational	Lagging	The current effort of this team to identify gaps between ISO55000 and current SNL practices is the only effort made to try and understand asset management and was not asked for nor required by senior management. Other areas of communication, reviews and updates are non-existent as an Asset Management Policy does not exist.	Lack of an Asset Management System Policy	Create an Asset Management Policy
5 Leadership	5.2 Policy	Chris	Continuous Improvement	Birgitta	10	What has top management done to establish, communicate, implement, periodically review and, if required, update an asset management policy?	5.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented asset management policy , which is authorized by top management and communicated within the organization and is available to relevant stakeholders. The asset management policy: - Is appropriate to the purpose of the organization; - Provides a framework for setting objectives; - Includes commitment to satisfy applicable requirements; - Includes commitment to continuously improve the asset management system. The asset management policy is documented, communicated, available and visible to all who are responsible for asset management activities, and reviewed regularly. The asset management policy references the organizational plan and how asset management will be used to enable it, and clearly states its relation and alignment with other organizational	Lagging	With no formal AM policies in place, Sr Mgt has identified the need and has requested 4853 AM WG to perform a gap analysis of the organization's current AM policies against the requirements of ISO 55001.	No AM policies have been established for top mgt to communicate, implement, review, or update.	Once 4000 Division and Centers incorporates the AM objectives, policies, and goals in their annual Strategic Plans, a communication plan should be prepare to inform departments of the new AM policies, announce implementation plans, and designate periodic reviews and updates to the AM policies consistent with other policy review cycles.
5 Leadership	5.2 Policy	Chris	Data/Process Documentation	John	10	What has top management done to establish, communicate, implement, periodically review and, if required, update an asset management policy?	5.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented asset management policy , which is authorized by top management and communicated within the organization and is available to relevant stakeholders. The asset management policy: - Is appropriate to the purpose of the organization; - Provides a framework for setting objectives; - Includes commitment to satisfy applicable requirements; - Includes commitment to continuously improve the asset management system. The asset management policy is documented, communicated, available and visible to all who are responsible for asset management activities, and reviewed regularly. The asset management policy references the organizational plan and how asset management will be used to enable it, and clearly states its relation and alignment with other organizational	Lagging	SNL does not have a comprehensive asset management policy, as discussed in previous questions. There are Corporate policies for construction, space management and maintenance, but not for other phases of asset management (planning, assessment, disposition). However, SNL does have a robust system for communicating, implementing, and reviewing/updating corporate policy. The Strategic Direction has not been updated since 2018, but SNL develops new goals and objectives annually, and these are communicated to management and flowed down to Division and Center plans for implementation. Metrics are developed to report progress up the management chain. Thus, if developed, an asset management policy would be disseminated and implemented effectively.	GAP: SNL does not have a comprehensive asset management policy that aligns with ISO 55001.	Develop the AMP and SAMP with top management input. Once the policy and plan are ready, use a top-down approach to implement and communicate the new information.

<div></div>	ISO 55001 Alignment Rating		% Lagging Ratings	Gap Analysis Alignment Rating	IAM Maturity Rating	IAM Maturity Rating Definitions								
	Lagging		86.2%	Lagging	Maturity Level 0/1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.								
	ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.								
	4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.								
	5 Leadership	Lagging immediate attention required	95.2%											
	6 Planning	Lagging immediate attention required	100.0%											
	7 Support	Lagging immediate attention required	81.8%											
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ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
5 Leadership	5.2 Policy	Chris	Leadership & Commitment	Chris	10	What has top management done to establish, communicate, implement, periodically review and, if required, update an asset management policy?	5.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented asset management policy , which is authorized by top management and communicated within the organization and is available to relevant stakeholders. The asset management policy: - Is appropriate to the purpose of the organization; - Provides a framework for setting objectives; - Includes commitment to satisfy applicable requirements; - Includes commitment to continuously improve the asset management system. The asset management policy is documented, communicated, available and visible to all who are responsible for asset management activities, and reviewed regularly. The asset management policy references the organizational plan and how asset management will be used to enable it, and clearly states its relation and alignment with other organizational	Lagging	A plan, PLN-022, exists which outlines our approach, but an asset management policy does not exist.	There is no SAMP	
5 Leadership	5.3 Org Roles & Responsibilities	Chris	AM Performance Monitoring & Evaluation	Waylon	11	How has top management ensured that the responsibilities and authorities for relevant roles are assigned and communicated within the organization?	5.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Top management have assigned responsibility and authority for: Establishment and update of the SAMP, asset management objectives and asset management plan(s); ensuring the adequacy, ongoing suitability and effectiveness of the asset management system and ensuring that it supports delivery of the SAMP and conforms to the requirements of ISO 55001; reporting to top management on the performance of the AM system.	Aligning	Roles and Responsibilities as an Organization are clearly defined today but from the perspective of Asset Management have no relation or alignment. However, it would not be hard to associate asset management responsibilities with already defined roles.	Lack of an Asset Management System Policy	Create an Asset Management Policy that defines the asset management responsibilities that will become part of existing roles.
5 Leadership	5.3 Org Roles & Responsibilities	Chris	AMP/LCAMP/SAMP/Org Plan - 4851	Gabe	11	How has top management ensured that the responsibilities and authorities for relevant roles are assigned and communicated within the organization?	5.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Top management have assigned responsibility and authority for: Establishment and update of the SAMP, asset management objectives and asset management plan(s); ensuring the adequacy, ongoing suitability and effectiveness of the asset management system and ensuring that it supports delivery of the SAMP and conforms to the requirements of ISO 55001; reporting to top management on the performance of the AM system.	Lagging	The need is identified, but there lacks a clear set of authorities for various responsibilities in Asset Management. This will be determined in a Plan document, where roles and responsibilities are clearly defined.	No assigned responsibilities and roles, signed off by top management.Top management should also provide feedback on a periodic basis as results are reported and reviewed.	As the asset management documentation is developed, include a section with Roles & Responsibilities outlining the relevant stakeholders and roles people will take part in for the various stages of asset management.
5 Leadership	5.3 Org Roles & Responsibilities	Chris	AMP/LCAMP/SAMP/Org Plan - 4854	Diane	11	How has top management ensured that the responsibilities and authorities for relevant roles are assigned and communicated within the organization?	5.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Top management have assigned responsibility and authority for: Establishment and update of the SAMP, asset management objectives and asset management plan(s); ensuring the adequacy, ongoing suitability and effectiveness of the asset management system and ensuring that it supports delivery of the SAMP and conforms to the requirements of ISO 55001; reporting to top management on the performance of the AM system.	Lagging	The need has been identified, but no roles have been established that convey any responsibility or authority over the Asset Management Policy.	The responsibilities and authorities of key functions need to be defined. Development of job descriptions and responsibilities/roles is necessary. We need to determine whether the position is filled internally or externally and what that decision impacts (ex. internal workload shift, external contracting, training, etc.)	The responsibilities and authorities of key functions need to be defined. Development of job descriptions and responsibilities/roles is necessary. We need to determine whether the position is filled internally or externally and what that decision impacts (ex. internal workload shift, external contracting, training, etc.)
5 Leadership	5.3 Org Roles & Responsibilities	Chris	Asset Scope/Portfolio Requirements	Waylon	11	How has top management ensured that the responsibilities and authorities for relevant roles are assigned and communicated within the organization?	5.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Top management have assigned responsibility and authority for: Establishment and update of the SAMP, asset management objectives and asset management plan(s); ensuring the adequacy, ongoing suitability and effectiveness of the asset management system and ensuring that it supports delivery of the SAMP and conforms to the requirements of ISO 55001; reporting to top management on the performance of the AM system.	Lagging	Roles and Responsibilities as an Organization are defined today but from the perspective of Asset Management have no relation or alignment. The interfaces between functions related to asset management that exist in different SNL 'silos' need to be adequately formalized.	Lack of an Asset Management System Policy	Create an Asset Management Policy that defines the asset management responsibilities across different functions and the potential re-organization that may be need in order to effectively implement an Asset Management Policy/System.
5 Leadership	5.3 Org Roles & Responsibilities	Chris	Resources/Roles & Responsibilities	Jeremy	11	How has top management ensured that the responsibilities and authorities for relevant roles are assigned and communicated within the organization?	5.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Top management have assigned responsibility and authority for: Establishment and update of the SAMP, asset management objectives and asset management plan(s); ensuring the adequacy, ongoing suitability and effectiveness of the asset management system and ensuring that it supports delivery of the SAMP and conforms to the requirements of ISO 55001; reporting to top management on the performance of the AM system.	Lagging	Only are few of the responsibilities and authorities necessary to support the Asset Management Program have been created and assigned within the organization. The Top management has not committed to a policy or objectives, and assigned responsibility for the overall program. There are a number of relevant roles and accountabilities that still need to be established for our organization which can be accomplished through the strategic asset management plan and policy, and the development of asset management objectives.	TThe ISO 55001 gap is the absence of an asset management policy, asset management objectives, and a SAMP.	Support for an asset management policy at the coporate level with annual objectives to develop/improve our asset management system would help close this gap.

	ISO 55001 Alignment Rating		% Lagging Ratings	Gap Analysis Alignment Rating	IAM Maturity Rating		IAM Maturity Rating Definitions							
	Lagging		86.2%	Lagging	Maturity Level 0/1		The organization has identified the need for this requirement, and there is evidence of intent to progress it.							
	ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3		The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.							
	4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.								
	5 Leadership	Lagging immediate attention required	95.2%											
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	9 Performance Evaluation	Lagging immediate attention required	100.0%											
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ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
6 Planning	6.1 Actions to address Risk of AMS	Diane/Gabe	AM Performance Monitoring & Evaluation	Waylon	12	How does the organization demonstrate that risks and opportunities that could affect the ability of the asset management system to achieve its intended outcomes are adequately considered and processes put in place to assure that the desired outcomes are achieved and undesired effects are mitigated?	6.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Processes and measures are in place to assure that the desired outcomes of the asset management system are achieved and undesired effects are mitigated. The organization's internal and external context (c.f. 4.1) and stakeholder requirements (c.f. 4.2) are considered in determining the risks and opportunities, including how they vary over time, and actions are planned to address these. The organization regularly monitors the effectiveness of actions and processes for addressing the risks and opportunities. The organization can demonstrate how continual improvement of the asset management system is achieved through risk and opportunity management.	Lagging	In regards to 6.1.2 Risks and Opportunities the risks are to be addressed via the planning stages of creating an Asset Management System. This has not occurred yet as there has been no direction from Senior Leadership to create an asset management system.	Lack of direction from leadership in regards to asset management	A decision from senior Facilities leadership about whether or not to create an asset management system.
6 Planning	6.1 Actions to address Risk of AMS	Diane/Gabe	Continuous Improvement	Birgitta	12	How does the organization demonstrate that risks and opportunities that could affect the ability of the asset management system to achieve its intended outcomes are adequately considered and processes put in place to assure that the desired outcomes are achieved and undesired effects are mitigated?	6.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Processes and measures are in place to assure that the desired outcomes of the asset management system are achieved and undesired effects are mitigated. The organization's internal and external context (c.f. 4.1) and stakeholder requirements (c.f. 4.2) are considered in determining the risks and opportunities, including how they vary over time, and actions are planned to address these. The organization regularly monitors the effectiveness of actions and processes for addressing the risks and opportunities. The organization can demonstrate how continual improvement of the asset management system is achieved through risk and opportunity management.	Lagging	ORG 4700/4800 Mgt System does assess/mitigate risks and opportunities on building assets and Projects that impact division/corporates objectives, but typically does not address the risks from an AM perspective. Existing assessments = WM T - Project Matrix with risk vs impact / FIMS/BUILDER for building asset assessments.	No AMS exists for the organization to demonstrate risks and opportunities are considered and mitigated.	The AMPs would establish procedures to evaluate the risk and opportunities that could affect the AMS ability to achieve its intended out comes derived from the SAMP are adequately considered and undesirable effects mitigated.
6 Planning	6.2 AM Objectives	Diane/Gabe	AM & Org Objectives/AM Policy	Pete	15	How does the organisation establish, document and maintain asset management plans to achieve the asset management objectives ensuring alignment with the asset management policy and the SAMP?	—	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has plan(s) in place, to achieve the AM Objectives , which are aligned with the AM policy and the SAMP. The plans document what is to be done, by when, who is to be responsible and the resources required to successfully implement them. The organization can demonstrate that the plans take account of risks and opportunities, including those which may change with time, and that they are integrated / aligned with other relevant organizational plans.	Lagging	Neither an asset management policy nor asset management objectives exist. Therefore, there are no requirements or guidelines to align the SAMP nor the AMPs with an asset management policy nor asset management objectives.	The ISO 55001 gap is the absence of an asset management policy, asset management objectives, and a SAMP.	Develop an Asset Management Policy, SAMP, and Asset Management Objectives and incorporate principles and expectations related to the development of larea and lifecycle asset management plans.
6 Planning	6.2 AM Objectives	Diane/Gabe	AM Performance Monitoring & Evaluation	Waylon	13	How has the organization established and documented asset management objectives, at relevant functions and levels, to align with and enable the achievement of the organizational objectives and asset management policy.	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented asset management objectives , at relevant functions and levels, to align with and enable the achievement of the organizational objectives and asset management policy. The organization considers the requirements of relevant stakeholders and of other financial, technical, legal, regulatory and organisational requirements in establishing the asset management objectives. The organization ensures that asset management objectives are integrated with the SAMP and are consistent with the decision making criteria. The organisation effectively communicates its asset management objectives with those who are responsible for achieving them. The asset management objectives are measurable (where practicable) and are being monitored, reviewed and updated.	Lagging	There is not currently an Asset Management System in place hence no asset management objectives	Lack of an asset management system/policy	Create an Asset Management System/Policy
6 Planning	6.2 AM Objectives	Diane/Gabe	AM Performance Monitoring & Evaluation	Waylon	14	How does the organization determine and document its planning processes, methods and decision criteria for developing the asset management plan(s) to achieve its asset management objectives?	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented its planning processes, methods and decision criteria for developing the asset management plan(s) to achieve its asset management objectives. The organization's planning processes and methods ensure that the plans: - achieve the required objectives - activities and resources are determined and prioritized using defined methods and decision criteria - are appropriate for the life cycle management of assets - address asset-related risks and opportunities - are achievable. The organization has established and documented processes to ensure that asset-related risks and opportunities, varying with time, are identified, assessed, managed and monitored. The planning process for achieving the asset	Lagging	Planning processes and procedures exist within SNL Facilities but none that are geared towards the creation of asset management plans	Lack of an asset management system/policy that details the planning requirements for creating asset management plans	Create an Asset Management System/Policy



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Lagging		86.2%	Lagging	Maturity Level 0/1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	
ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	
4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.	
5 Leadership	Lagging immediate attention required	95.2%				
6 Planning	Lagging immediate attention required	100.0%				
7 Support	Lagging immediate attention required	81.8%				
8 Operation	Lagging immediate attention required	85.7%				
9 Performance Evaluation	Lagging immediate attention required	100.0%				
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ISO 55001 Section		ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
6 Planning		6.2 AM Objectives	Diane/Gabe	AM Performance Monitoring & Evaluation	Waylon	15	How does the organisation establish, document and maintain asset management plans to achieve the asset management objectives ensuring alignment with the asset management policy and the SAMP?	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has plan(s) in place, to achieve the AM Objectives , which are aligned with the AM policy and the SAMP. The plans document what is to be done, by when, who is to be responsible and the resources required to successfully implement them. The organization can demonstrate that the plans take account of risks and opportunities, including those which may change with time, and that they are integrated / aligned with other relevant organizational plans.	Lagging	Asset Management Plans, Policy and SAMP do not currently exist.	Lack of an asset management system/policy	Create an Asset Management System/Policy
6 Planning		6.2 AM Objectives	Diane/Gabe	AMP/LCAMP/SAMP/Org Plan - 4851	Gabe	13	How has the organization established and documented asset management objectives, at relevant functions and levels, to align with and enable the achievement of the organizational objectives and asset management policy.	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented asset management objectives , at relevant functions and levels, to align with and enable the achievement of the organizational objectives and asset management policy. The organization considers the requirements of relevant stakeholders and of other financial, technical, legal, regulatory and organisational requirements in establishing the asset management objectives. The organization ensures that asset management objectives are integrated with the SAMP and are consistent with the decision making criteria. The organisation effectively communicates its asset management objectives with those who are responsible for achieving them. The asset management objectives are measurable (where practicable) and are being monitored, reviewed and updated.	Lagging	Objectives have not been explicitly defined; the AMA group is tasked with this effort. Some objectives have been defined through individual AMPs, but there lacks a system in place. Once objectives have been laid out, they will be checked to ensure that they enable the achievement of the organizational objectives and asset management policy.	No clear objectives as of yet. No systematic outline of consistently achieving the requirements of the asset managemet system.	Document asset management objectives as part of the asset management architecture. These objectives should be measurable and monitored. Include relevant functions and levels that align with organizational objectives and asset management policy. Communicate these objectives with those who are responsible for achieving them.
6 Planning		6.2 AM Objectives	Diane/Gabe	AMP/LCAMP/SAMP/Org Plan - 4851	Gabe	14	How does the organization determine and document its planning processes, methods and decision criteria for developing the asset management plan(s) to achieve its asset management objectives?	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented its planning processes, methods and decision criteria for developing the asset management plan(s) to achieve its asset management objectives. The organization's planning processes and methods ensure that the plans: - achieve the required objectives - activities and resources are determined and prioritized using defined methods and decision criteria - are appropriate for the life cycle management of assets - address asset-related risks and opportunities - are achievable. The organization has established and documented processes to ensure that asset-related risks and opportunities, varying with time, are identified, assessed, managed and monitored. The planning process for achieving the asset	Lagging	The need for this requirement is known by the organization. While some LCAMPs have been, and are being developed, there is not yet a systematic, documented process by which LCAMPs follow to establish their criteria. The creation of a documented process will guide how LCAMPs are developed. The current process is somewhat arbitrary and based on the current needs of facilities regarding funding and project development.	Documented criteria oulining the organization's planning process to achieve the asset management objectives, allocate resources, and monitor the progress of the plan.	The AMA team will develop a structure which will be followed when AMPs are created. The team should develop a framework for the future creation of various AMPs, which will align with the objectives and policies previously created.
6 Planning		6.2 AM Objectives	Diane/Gabe	AMP/LCAMP/SAMP/Org Plan - 4851	Gabe	15	How does the organisation establish, document and maintain asset management plans to achieve the asset management objectives ensuring alignment with the asset management policy and the SAMP?	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has plan(s) in place, to achieve the AM Objectives , which are aligned with the AM policy and the SAMP. The plans document what is to be done, by when, who is to be responsible and the resources required to successfully implement them. The organization can demonstrate that the plans take account of risks and opportunities, including those which may change with time, and that they are integrated / aligned with other relevant organizational plans.	Lagging	The organization has identified the means of achieving the requirements to meet objectives, however it is not yet done in a systematic fashion. While the organization can demonstrate that plans have been developed, the system provided for its creation is different than previous LCAMPs and the process also differs across organizations. Therefore, there is still a need to provide systematic requirements.	No clear asset management objectives. More LCAMPs that follow the future asset management system should be developed to provide evidence that the organization is maintaining assets and meeting objectives.	Once objectives and policies are put in place, all AMPs should be created against these. Plans have been created, but future plans should follow the new architecture. Consider kickoff meetings prior to the creation of a new plan to review objectives, policies, and framework, and how changes to the plan should be done. The plans should take into account any changes, and opportunities for improvement identified in the AMP should be followed up on.
6 Planning		6.2 AM Objectives	Diane/Gabe	AMP/LCAMP/SAMP/Org Plan - 4854	Diane	13	How has the organization established and documented asset management objectives, at relevant functions and levels, to align with and enable the achievement of the organizational objectives and asset management policy.	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented asset management objectives , at relevant functions and levels, to align with and enable the achievement of the organizational objectives and asset management policy. The organization considers the requirements of relevant stakeholders and of other financial, technical, legal, regulatory and organisational requirements in establishing the asset management objectives. The organization ensures that asset management objectives are integrated with the SAMP and are consistent with the decision making criteria. The organisation effectively communicates its asset management objectives with those who are responsible for achieving them. The asset management objectives are measurable (where practicable) and are being monitored, reviewed and updated.	Lagging	The organization has identified a need but no conclusive asset management documents have been established to convey asset management objectives at relevant functions and levels.	Asset Management Objectives are not developed. They need to be consistent and aligned with organizational objectives, updated, measurable, monitored, communicated, reviewed. An Asset Management Plan and SAMP need to be developed with top management support and guidance so that integration will be achievable across multiple organizations. The bulk of what we need to answer moving into the development of the policy are tied to ISO 55001 section 6.2.2.2 a-k (criteria for decision making, prioritization, consistent processes and methods to manage life cycles, what will be done, resources, expected results, metrics of success, etc.). In addition, once the information is established, we need to be able to adjust the report to easily transition to NNSA capabilities from SNL Capabilities (which have some alignment but not entirely).	



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Lagging		86.2%	Lagging	Maturity Level 0/1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	
ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	
4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.	
5 Leadership	Lagging immediate attention required	95.2%				
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7 Support	Lagging immediate attention required	81.8%				
8 Operation	Lagging immediate attention required	85.7%				
9 Performance Evaluation	Lagging immediate attention required	100.0%				
10 Improvement	Lagging immediate attention NOT required	78.9%				

ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
6 Planning	6.2 AM Objectives	Diane/Gabe	AMP/LCAMP/SAMP/Org Plan - 4854	Diane	14	How does the organization determine and document its planning processes, methods and decision criteria for developing the asset management plan(s) to achieve its asset management objectives?	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented its planning processes, methods and decision criteria for developing the asset management plan(s) to achieve its asset management objectives. The organization's planning processes and methods ensure that the plans: - achieve the required objectives - activities and resources are determined and prioritized using defined methods and decision criteria - are appropriate for the life cycle management of assets - address asset-related risks and opportunities - are achievable. The organization has established and documented processes to ensure that asset-related risks and opportunities, varying with time, are identified, assessed, managed and monitored. The planning process for achieving the asset	Lagging	The need for this requirement has been identified. Planning for improvement of assets is maintained in numerous spreadsheets. These documents reference FIMS/Builder information so that development/improvement can be tracked. That said, much of the information is disjointed and does not have a consistent method of validating information. Much of the coordination and prioritization is done between the Division and the Partnership Planner. The priorities tend to be silo-ed by Division.	The organization is currently working on developing a planning process and the associated decision making criteria necessary to align with organizational objectives. Since the asset management plan and objectives have not been developed, it is unclear how this information will be integrated.	The organization is currently working on developing a planning process and the associated decision making criteria necessary to align with organizational objectives. Since the asset management plan and objectives have not been developed, it is unclear how this information will be integrated.
6 Planning	6.2 AM Objectives	Diane/Gabe	AMP/LCAMP/SAMP/Org Plan - 4854	Diane	15	How does the organisation establish, document and maintain asset management plans to achieve the asset management objectives ensuring alignment with the asset management policy and the SAMP?	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has plan(s) in place, to achieve the AM Objectives , which are aligned with the AM policy and the SAMP. The plans document what is to be done, by when, who is to be responsible and the resources required to successfully implement them. The organization can demonstrate that the plans take account of risks and opportunities, including those which may change with time, and that they are integrated / aligned with other relevant organizational plans.	Lagging	The need has been identified but with no true Asset Management Policy in place, much of the information resides in various formats, degrees of maturity and location (institutional knowledge, PC Hard drive, Maximo, FIMS, etc.)	The gap is that there are no formal asset management objectives, plans or policy. Individually, LCAMPs have been initiated to "track" and monitor Asset life cycles. FIMS, Builder and Maximo, in theory, establish and document assets as recognized by the NNSA/DOE.	Integration would need to occur across organizations to consolidate asset information. All the currently established ways for monitoring and tracking assets would require consolidation and consistency in reporting (in timing, and information submitted). The information would need to reflect the newly established AMP objectives and reporting requirements.
6 Planning	6.2 AM Objectives	Diane/Gabe	Continuous Improvement	Birgitta	14	How does the organization determine and document its planning processes, methods and decision criteria for developing the asset management plan(s) to achieve its asset management objectives?	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented its planning processes, methods and decision criteria for developing the asset management plan(s) to achieve its asset management objectives. The organization's planning processes and methods ensure that the plans: - achieve the required objectives - activities and resources are determined and prioritized using defined methods and decision criteria - are appropriate for the life cycle management of assets - address asset-related risks and opportunities - are achievable. The organization has established and documented processes to ensure that asset-related risks and opportunities, varying with time, are identified, assessed, managed and monitored. The planning process for achieving the asset	Lagging	ORG 4700/4800 has not identified the need for AM objectives to be established or documented.	AM plans can not be developed without established AM objectives.	The development of the AMPs would focused on achieving the AM objectives using the same planning process and documentation methods applied on other Facilities initiatives. A team, selected by top mgt, would determine the decision making criteria and involve the appropriate SME's. Documentation might include AM template and process maps with their interactions with other Facilities process.
6 Planning	6.2 AM Objectives	Diane/Gabe	Data/Process Documentation	John	13	How has the organization established and documented asset management objectives, at relevant functions and levels, to align with and enable the achievement of the organizational objectives and asset management policy.	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented asset management objectives , at relevant functions and levels, to align with and enable the achievement of the organizational objectives and asset management policy. The organization considers the requirements of relevant stakeholders and of other financial, technical, legal, regulatory and organisational requirements in establishing the asset management objectives. The organization ensures that asset management objectives are integrated with the SAMP and are consistent with the decision making criteria. The organization effectively communicates its asset management objectives with those who are responsible for achieving them. The asset management objectives are measurable (where practicable) and are being monitored, reviewed and updated. The organization has established and documented its planning processes, methods and decision criteria for developing the asset management plan(s) to achieve its asset management objectives.	Lagging	Two corporate goals have objectives that relate to asset management, but both only address a very specific elements of an asset's lifecycle. Asset management as a whole is not discussed specifically. GOAL 4: Improve effectiveness of Laboratories operations Objective 4.2 Address office and parking space constraints by creating new and optimizing what we have. GOAL 5: Position the Labs for the Future Objective 5.1 Develop and begin to implement a single vision for major (between \$5M-\$20M) capital investment priorities for the Labs Objective 5.8 Refine existing strategy and plans into a holistic, comprehensive, and integrated CapAx (capital acquisitions) Investment Strategy (capital investments above \$20M) that drive a long-range build plan that has DOE/NNSA support. The Corporate goals and objectives flow down to the Division 4000 Strategic Plan and Center 4800 plan. 4000 Strategic Goal 1: Ensure the success of our customers Milestone 1.2: Develop agile space strategies that help customers meet mission program deliverables, improve security, and fulfill infrastructure needs. Milestone 1.4: Establish a process to implement management of programmatic real property by Facilities. (M. Romanos) 4000 Strategic Goal 4: Innovation: Position the Laboratories for the future Milestone 4.1: Implement Infrastructure Investment 2040 Strategy to support the Labs' long-term strategic goals.	GAP: While SNL has a good system for disseminating and implementing objectives, there is no asset management plan to disseminate, nor has SNL established and documented asset management objectives.	Develop the SAMP to include objectives that align with the AMP and overall organizational objectives.
6 Planning	6.2 AM Objectives	Diane/Gabe	Data/Process Documentation	John	14	How does the organization determine and document its planning processes, methods and decision criteria for developing the asset management plan(s) to achieve its asset management objectives?	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization's planning processes and methods ensure that the plans: - achieve the required objectives - activities and resources are determined and prioritized using defined methods and decision criteria - are appropriate for the life cycle management of assets - address asset-related risks and opportunities - are achievable. The organization has established and documented processes to ensure that asset-related risks and opportunities, varying with time, are identified, assessed, managed and monitored. The planning process for achieving the asset	Lagging	SNL has a contractor/quality assurance program at all levels of management. Corporate policies CA001: Enterprise Risks, Opportunities, Issues Management Policy and CA002 Performance Monitoring Policy spell out SNL's methodology for monitoring risks and issues, and 4800 has a detailed process management system that is documented via the FAST tool on the 4800 website. Again, the issue is that there is no comprehensive asset management policy.	GAP: There is no comprehensive asset management policy, so there is no method for determining and documenting SNL's planning processes, methods and decision criteria.	Once the AMP and SAMP have been developed, use the resources in Department 4801 to determine and document SNL's planning processes, methods and decision criteria. Frequent self-assessments (or perhaps an audit by an objective third party) should be used to evaluate the success of the asset management program.



ISO 55001 Alignment Rating		% Lagging Ratings	Gap Analysis Alignment Rating	IAM Maturity Rating	IAM Maturity Rating Definitions	
Lagging		86.2%	Lagging	Maturity Level 0/1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	
ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	
4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.	
5 Leadership	Lagging immediate attention required	95.2%				
6 Planning	Lagging immediate attention required	100.0%				
7 Support	Lagging immediate attention required	81.8%				
8 Operation	Lagging immediate attention required	85.7%				
9 Performance Evaluation	Lagging immediate attention required	100.0%				
10 Improvement	Lagging immediate attention NOT required	78.9%				


ISO 55001 Section		ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
6 Planning		6.2 AM Objectives	Diane/Gabe	Data/Process Documentation	John	15	How does the organisation establish, document and maintain asset management plans to achieve the asset management objectives ensuring alignment with the asset management policy and the SAMP?	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has plan(s) in place, to achieve the AM Objectives , which are aligned with the AM policy and the SAMP. The plans document what is to be done, by when, who is to be responsible and the resources required to successfully implement them. The organization can demonstrate that the plans take account of risks and opportunities, including those which may change with time, and that they are integrated / aligned with other relevant organizational plans.	Lagging	SNL maintains multiple levels of planning documents - Corporate, Division, and Center. Lower level plans must align with higher-level plans, and staff at each level are dedicated to developing, implementing, and tracking the progress of these plans. Facilities has a document management team that has several dedicated process coordinators, tech writers, and artists. Again, the issue is the lack of a SAMP.	GAP: SNL does not have a SAMP, so there is no process to establish, document or maintain it.	Develop the AMP and SAMP using the existing 4800 document management system in Department 4801. Use existing processes and resources to keep the plan updated. Frequent self-assessments (or perhaps an audit by an objective third party) should be used to evaluate the success of the asset management program.
6 Planning		6.2 AM Objectives	Diane/Gabe	Integrated Asset Management	Birgitta	13	How has the organization established and documented asset management objectives, at relevant functions and levels, to align with and enable the achievement of the organizational objectives and asset management policy.	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented asset management objectives , at relevant functions and levels, to align with and enable the achievement of the organizational objectives and asset management policy. The organization considers the requirements of relevant stakeholders and of other financial, technical, legal, regulatory and organisational requirements in establishing the asset management objectives. The organization ensures that asset management objectives are integrated with the SAMP and are consistent with the decision making criteria. The organisation effectively communicates its asset management objectives with those who are responsible for achieving them. The asset management objectives are measurable (where practicable) and are being monitored, reviewed and updated.	Lagging	ORG 4700/4800 has not identified the need for AM objectives to be established or documented, specifically SAMPs.	No AM objectives have been established to align with Organizational objectives.	4000 Division and Centers should establish AM objectives during the annual Strategic Planning process and formally document in the SAMP. These objectives should be supported by 4000 ALD and at the Lab Director level.
6 Planning		6.2 AM Objectives	Diane/Gabe	Integrated Asset Management	Birgitta	15	How does the organisation establish, document and maintain asset management plans to achieve the asset management objectives ensuring alignment with the asset management policy and the SAMP?	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has plan(s) in place, to achieve the AM Objectives , which are aligned with the AM policy and the SAMP. The plans document what is to be done, by when, who is to be responsible and the resources required to successfully implement them. The organization can demonstrate that the plans take account of risks and opportunities, including those which may change with time, and that they are integrated / aligned with other relevant organizational plans.	Lagging	ORG 4700/4800 has not identified the need to established or documented AM plans, policies, or SAMP.	AM plans can not be established until AM objective and policies exist for alignment.	Once 4000 Facilities defines the Asset Management (AM) objectives and policies and the SAMP has been developed, the AMPs can establish documented processes to achieve these objectives all while maintaining alignment with AM policies and SAMP.
6 Planning		6.2 AM Objectives	Diane/Gabe	Leadership & Commitment	Chris	13	How has the organization established and documented asset management objectives, at relevant functions and levels, to align with and enable the achievement of the organizational objectives and asset management policy.	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented asset management objectives , at relevant functions and levels, to align with and enable the achievement of the organizational objectives and asset management policy. The organization considers the requirements of relevant stakeholders and of other financial, technical, legal, regulatory and organisational requirements in establishing the asset management objectives. The organization ensures that asset management objectives are integrated with the SAMP and are consistent with the decision making criteria. The organisation effectively communicates its asset management objectives with those who are responsible for achieving them. The asset management objectives are measurable (where practicable) and are being monitored, reviewed and updated.	Lagging	Sandia has a documented plan to assess assets, but not a SAMP. PLN-022 exists in order to assess assets, but does not address organizational objectives. A committee exists to rank potential re-capitalization projects, but I believe the process is not documented. Being that there is no official plan, quantitative and/or qualitative measurements do not necessarily exist.	A SAMP needs to be developed to pull all of the other documents together	Create a SAMP.
6 Planning		6.2 AM Objectives	Diane/Gabe	Leadership & Commitment	Chris	14	How does the organization determine and document its planning processes, methods and decision criteria for developing the asset management plan(s) to achieve its asset management objectives?	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented its planning processes, methods and decision criteria for developing the asset management plan(s) to achieve its asset management objectives. The organization's planning processes and methods ensure that the plans: - achieve the required objectives - activities and resources are determined and prioritized using defined methods and decision criteria - are appropriate for the life cycle management of assets - address asset-related risks and opportunities - are achievable. The organization has established and documented processes to ensure that asset-related risks and opportunities, varying with time, are identified, assessed, managed and monitored. The planning process for achieving the asset	Lagging	The only existing document is PLN-022, which documents the process to assess assets, but does not address management objectives. The organization documents it's processes to asses and re-capitalize assets using multiple documents (PLN-022 and WI-084). The organization does not, however, have a document, such as a SAMP document.	A SAMP is necessary	Create a SAMP.



ISO 55001 Alignment Rating		% Lagging Ratings	Gap Analysis Alignment Rating	IAM Maturity Rating	IAM Maturity Rating Definitions	
Lagging		86.2%	Lagging	Maturity Level 0/1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	
ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	
4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.	
5 Leadership	Lagging immediate attention required	95.2%				
6 Planning	Lagging immediate attention required	100.0%				
7 Support	Lagging immediate attention required	81.8%				
8 Operation	Lagging immediate attention required	85.7%				
9 Performance Evaluation	Lagging immediate attention required	100.0%				
10 Improvement	Lagging immediate attention NOT required	78.9%				

ISO 55001 Section		ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
6 Planning		6.2 AM Objectives	Diane/Gabe	Leadership & Commitment	Chris	15	How does the organisation establish, document and maintain asset management plans to achieve the asset management objectives ensuring alignment with the asset management policy and the SAMP?	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has plan(s) in place, to achieve the AM Objectives , which are aligned with the AM policy and the SAMP. The plans document what is to be done, by when, who is to be responsible and the resources required to successfully implement them. The organization can demonstrate that the plans take account of risks and opportunities, including those which may change with time, and that they are integrated / aligned with other relevant organizational plans.	Lagging	The only asset management documents that exist are PLN-022 and WI-084. There are 2 databases, Builder and CAIS, where asset condition information is kept, but there is not an overarching SAMP document.	A SAMP is necessary	Create a SAMP.
6 Planning		6.2 AM Objectives	Diane/Gabe	Resources/Roles & Responsibilities	Jeremy	13	How has the organization established and documented asset management objectives, at relevant functions and levels, to align with and enable the achievement of the organizational objectives and asset management policy.	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented asset management objectives , at relevant functions and levels, to align with and enable the achievement of the organizational objectives and asset management policy. The organization considers the requirements of relevant stakeholders and of other financial, technical, legal, regulatory and organisational requirements in establishing the asset management objectives. The organization ensures that asset management objectives are integrated with the SAMP and are consistent with the decision making criteria. The organisation effectively communicates its asset management objectives with those who are responsible for achieving them. The asset management objectives are measurable (where practicable) and are being monitored, reviewed and updated.	Lagging	The origination has initiated objectives for asset management at the lower levels in the organization. The decisions made to date and the objectives to complete X number of AMPs can be us to inform the SAMP. The current objectives are not based on a completed SAMP. The asset management plans we have committed to develop align with DOE guidance for planning, perceived risk associated with asset failures, and corporate objectives in some cases. They were selected because we know these system impact operations and asset management is a good way to analyze the risks and funding needs.	The ISO 55001 gap is the absence of an asset management policy, asset management objectives, and a SAMP. We have documented policy areas and process that support the management of our assets. They would need to be updated to ensure alignment with the SAMP.	The development of asset management objectives and a SAMP would help close this GAP. Then we could align our processes, LCAMPs, and other efforts with these policies and perform GAP analysis to determine where additional support, improvements, and resources are required to align.
6 Planning		6.2 AM Objectives	Diane/Gabe	Resources/Roles & Responsibilities	Jeremy	14	How does the organization determine and document its planning processes, methods and decision criteria for developing the asset management plan(s) to achieve its asset management objectives?	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has established and documented its planning processes, methods and decision criteria for developing the asset management plan(s) to achieve its asset management objectives. The organization's planning processes and methods ensure that the plans: - achieve the required objectives - activities and resources are determined and prioritized using defined methods and decision criteria - are appropriate for the life cycle management of assets - address asset-related risks and opportunities - are achievable. The organization has established and documented processes to ensure that asset-related risks and opportunities, varying with time, are identified, assessed, managed and monitored. The planning process for achieving the asset	Lagging	The organization has planning processes, methods and decision criteria that align with DOE guidance for specific funding programs, the corporation has a budget process and internal policies for allocation of resources, and our center has a well developed plan to guide and prioritize the use of allocated resources. An example is the use of the R3S process to plan for future needs, allocation of resources and funded projects. This section is lagging because as an organization we are in the beginning stages of using the asset management plan(s) to inform decisions in each of the planning process. We also need to formalize our asset management objectives, and consider how asset management is integrated into these existing processes.	The ISO 55001 gap is the absence of an asset management policy, and asset management objectives.	Right now we are taking a mid-level and bottoms up approach to develop asset management. The development of asset management objectives and a SAMP would help close this GAP. Then we could align our processes, LCAMPs, and other efforts with these policies and perform GAP analysis to determine where additional support, improvements, and resources are required to align.
6 Planning		6.2 AM Objectives	Diane/Gabe	Resources/Roles & Responsibilities	Jeremy	15	How does the organization establish, document and maintain asset management plans to achieve the asset management objectives ensuring alignment with the asset management policy and the SAMP?	6.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has plan(s) in place, to achieve the AM Objectives , which are aligned with the AM policy and the SAMP. The plans document what is to be done, by when, who is to be responsible and the resources required to successfully implement them. The organization can demonstrate that the plans take account of risks and opportunities, including those which may change with time, and that they are integrated / aligned with other relevant organizational plans.	Lagging	The organization is currently working to establish, document and maintain asset management plans. These are system level asset management plans that are currently not directly tied to asset management objectives. The staff has a vision of what our asset management plans are to become, but we are lagging in the management policy area and the development of the SAMP.	The ISO 55001 gap is the absence of an asset management policy, asset management objectives, and a SAMP.	Right now we are taking a mid-level and bottoms up approach to develop LCAMP in support of asset management. The development of asset management objectives and a SAMP would help close this GAP. Then we could ensure that our efforts are alling with the objectives.
7 Support		7.1 Resources	Jeremy	AM Performance Monitoring & Evaluation	Waylon	17	How can the organization demonstrate that the resources required to meet the asset management objectives and to implement activities specified in the asset management plans will be provided?	7.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has a fully developed and embedded approach to identifying resource requirements for achieving the asset management objectives, and that plans can be demonstrated as aligned to resources. Resource planning demonstrates how the plan will be consistent with policies, risk management, supply chain, delivery organizations and other constraints.	Lagging	In regards to 7.1.2 Asset Portfolio; a) & b) Asset Management Plans do not exist, c) raw material requirements are not the purview of Facilities, d) & e) there is little to no consultation and planning with Facilities concerning asset management resource requirements when a mission expands or increases utilization of an asset- typically Facilities has to play "catch-up" and staff up or stretch existing staff to meet the additional demand.	Lack of an asset management system/policy	Create an Asset Management System/Policy
7 Support		7.1 Resources	Jeremy	AMP/LCAMP/SAMP/Org Plan - 4851	Gabe	16	How does the organization ensure that resources required to establish, implement maintain and improve the asset management system are determined and provided?	7.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that it has evaluated and provided adequate resources to establish, maintain and improve the asset management system.	Lagging	Resources such as Maximo, CAIS, BUILDER, the WCC processes, Work Planning & Control, serve as resources help maintain and improve asset management. However other resources such as personnel and funding are lacking. While LCAMPs have been developed which help to establish what resources are required, the organization cannot currently demonstrate consistently achieving resource requirements.	Many resources are lacking, and there isn't a way to consistently utilize resources to achieve the asset management objectives.	All resources must be identified during the creation of asset management plans. At this point, objectives and policies should be in place. When new plans are being created, stakeholders should be aware of what resources are required for the management of the asset(s) in question. If there is a lack of resources, the plan should establish a timeline of acquiring the resources and how.
7 Support		7.1 Resources	Jeremy	AMP/LCAMP/SAMP/Org Plan - 4854	Diane	16	How does the organization ensure that resources required to establish, implement maintain and improve the asset management system are determined and provided?	7.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that it has evaluated and provided adequate resources to establish, maintain and improve the asset management system.	Lagging	The need has been identified. At this time it is uncertain to what degree resources will be required to implement, maintain and improve the asset management system.	Once Asset Management plans and objectives are been determined. An organizational map can be created to identify available resources for planned activities. Options for resourcing activities may also be necessary. It will require collaboration and integration amongst a few groups	Once Asset Management plans and objectives ave been determined. An organizational map can be created to identify available resources for planned activities. Options for resourcing activities may also be necessary. It will require collaboration and integration amongst a few groups

	ISO 55001 Alignment Rating		% Lagging Ratings	Gap Analysis Alignment Rating	IAM Maturity Rating	IAM Maturity Rating Definitions								
	Lagging		86.2%	Lagging	Maturity Level 0/1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.								
	ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.								
	4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.								
	5 Leadership	Lagging immediate attention required	95.2%											
	6 Planning	Lagging immediate attention required	100.0%											
	7 Support	Lagging immediate attention required	81.8%											
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ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
7 Support	7.1 Resources	Jeremy	Continuous Improvement	Birgitta	16	How does the organization ensure that resources required to establish, implement maintain and improve the asset management system are determined and provided?	7.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that it has evaluated and provided adequate resources to establish, maintain and improve the asset management system.	Lagging	Since no established AMS is in place, ORG 4700/4800 has not identified the need to committed resources required to maintain AMS.	No AMS exists to ensure proper resources are available.	The level of effort to establish, maintain, and improve the AMS is very much an unknown. The Gap analysis recommendations provided by this group can give guidance to Org 4000 mgt on resources. It all depends on the scope top management is willing to invest in AMS development and implementation. Recommendations from the analysis have identified which ISO Section should be undertaken for immediate action and which are less urgent or functioning well.
7 Support	7.1 Resources	Jeremy	Data/Process Documentation	John	17	How can the organization demonstrate that the resources required to meet the asset management objectives and to implement activities specified in the asset management plans will be provided?	7.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has a fully developed and embedded approach to identifying resource requirements for achieving the asset management objectives, and that plans can be demonstrated as aligned to resources. Resource planning demonstrates how the plan will be consistent with policies, risk management, supply chain, delivery organizations and other constraints.	Lagging	Facilities uses indirect funds to implement most asset management functions: planning, construction, maintenance, assessment, and disposition. Funds are limited, so Facilities has developed methodologies to allocate these funds to the most urgent needs. Most of these functions are part of a baseline need that is funded as part of the annual budgeting process. The Overhead Management Budget Office (OMBO) also makes funds available for urgent needs, but these are allocated year-to-year and are not certain to be available. Once the asset management policy is developed, its objectives will be prioritized along with other Center needs.	GAP: Without an asset management plan, SNL cannot demonstrate that it has the resources required to meet asset management objectives.	Currently, management believes that resources are sufficient. Once the AMP and SAMP have been developed, use self-assessments (or perhaps an audit by an objective third party) to evaluate whether proper resources have been allocated.
7 Support	7.1 Resources	Jeremy	Leadership & Commitment	Chris	17	How can the organization demonstrate that the resources required to meet the asset management objectives and to implement activities specified in the asset management plans will be provided?	7.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has a fully developed and embedded approach to identifying resource requirements for achieving the asset management objectives, and that plans can be demonstrated as aligned to resources. Resource planning demonstrates how the plan will be consistent with policies, risk management, supply chain, delivery organizations and other constraints.	Lagging	The organization needs to develop a SAMP, and then a robust condition assessment program within the SAMP. Those documents should be used to determine the necessary resources	Develop a SAMP	Create a SAMP.
7 Support	7.1 Resources	Jeremy	Resources/Roles & Responsibilities	Jeremy	16	How does the organization ensure that resources required to establish, implement maintain and improve the asset management system are determined and provided?	7.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that it has evaluated and provided adequate resources to establish, maintain and improve the asset management system.	Lagging	The organization has committed resources to the development asset management plans. The organization has not integrated some of the resources into the asset management program as their are still gaps that include, the integration of maintenance data, test reports, and condition that would make for a more efficient and effective asset management program. Specifically looking at ISO 15001 Section 7.2 the organization has not completed a SAMP that would help determine the resources needs of the program.	The ISO 55001 gap is the absence of an asset management policy, asset management objectives, and a SAMP. The asset management plans that would inform of the required resources are also not complete.	First step in the Gap Closure Recommendations is to develop the asset management objectives and policies. Then use this information to evaluate the resource needs to support asset management.
7 Support	7.2 Competence	Jeremy	AM Performance Monitoring & Evaluation	Waylon	18a	To what extent has the organization determined the necessary competence of persons doing work under its control that affects performance of assets, asset management or asset management systems.	7.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has a process / processes for identifying competency requirements for asset management activities and assessing competence of resources; both internal and external. The organization has identified appropriate activities to address any gaps in competence. Appropriate documented information is retained as evidence of competence. There is a process in place to periodically review current and future competency requirements.	Lagging	In regards to 7.2.2 Asset Portfolio; for the most part Facilities personnel resources are hired for their competence. SNL no longer hires untrained/uncertified individuals into an apprenticeship program and develops them in-house (although we should). There is, however, much more that can be done in terms of the hiring that is done from within SNL to make sure that personnel competencies match the job they are seeking.	Written craft competencies exist and would need to referenced or added to an asset management system/policy	Create an Asset Management System/Policy
7 Support	7.2 Competence	Jeremy	Data/Process Documentation	John	18a	To what extent has the organization determined the necessary competence of persons doing work under its control that affects performance of assets, asset management or asset management systems.	7.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has a process / processes for identifying competency requirements for asset management activities and assessing competence of resources; both internal and external. The organization has identified appropriate activities to address any gaps in competence. Appropriate documented information is retained as evidence of competence. There is a process in place to periodically review current and future competency requirements.	Lagging	While SNL has a training program that ensures employees are trained on safety and security issues, as well as Corporate and Center policies, competency assessments have not been established. Craft must maintain their licenses, and other personnel are encouraged to get role-specific training, but this is not tracked at a higher level.	GAP: Facilities does not have a system for determining the competency of people doing work that affects asset management.	Currently, management uses the SNL performance management system to evaluate the competence of workers. Once the AMP and SAMP have been developed, use self-assessments (or perhaps an audit by an objective third party) should be used to evaluate performance.
7 Support	7.2 Competence	Jeremy	Leadership & Commitment	Chris	18a	To what extent has the organization determined the necessary competence of persons doing work under its control that affects performance of assets, asset management or asset management systems.	7.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has a process / processes for identifying competency requirements for asset management activities and assessing competence of resources; both internal and external. The organization has identified appropriate activities to address any gaps in competence. Appropriate documented information is retained as evidence of competence. There is a process in place to periodically review current and future competency requirements.	Leading	The organization hires educated and experienced members of the work force. The organization also promotes on-going training. Members involved directly with the asset management program continue to develop skills.	There is no gap.	There is no gap.
7 Support	7.3 Awareness	Jeremy	AM & Org Objectives/AM Policy	Pete	19	How does the organization ensure that persons doing work under the organizations control are aware of the how they impact on the achievement of the asset management objectives?	7.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization ensures that all relevant persons are made aware of the asset management policy (e.g. induction courses, communication initiatives, prominent posting of the document) The organization monitors performance and effectiveness of asset management activities and effectively communicates output and trends. All persons are made aware of their contribution towards achieving the asset management objectives and the implications of the work they are doing. The organization has an embedded culture of risk management. All persons working under the organization's control are trained and made aware of the activities they are responsible for, the associated risks and required controls, and opportunities are systematically captured and where appropriate progressed. The organization has necessary controls in place to ensure contractors achieve the same requirements.	Lagging	Staff understands their roles relative to their individual job function and how their efforts contribute to the overall purpose of their respective departments. However, absent an Asset Management Policy and Asset Management Objectives, a clear line of sight of how their contributions align with the Asset Management System (AMS) can be improved. Annually the flow down of corporate strategic goals/objectives foster the development of supporting objectives at the division level to be implemented at the department level. However, the supporting objectives lack the specificity to clearly communicate the asset management outcome to be achieved. Metrics are developed to measure the success of the departmental objectives. However, these metrics measure the success of the objective completion rather than the level of success related to the expected outcome of the objective. The idea of Asset Management or Asset Management System is not new. However, there isn't a communication plan or strategy to consistently convey awareness, engage and/or promote asset management principles and the value thereof.	The ISO 55001 gap is the absence of an asset management communication plan/strategy.	Develop a asset management communication strategy at the department level that communicates asset management expectations and how the departmental/individual contributions affect the overall asset management objectives.

	ISO 55001 Alignment Rating		% Lagging Ratings	Gap Analysis Alignment Rating	IAM Maturity Rating		IAM Maturity Rating Definitions							
	Lagging		86.2%	Lagging	Maturity Level 0/1		The organization has identified the need for this requirement, and there is evidence of intent to progress it.							
	ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3		The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.							
	4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.								
	5 Leadership	Lagging immediate attention required	95.2%											
	6 Planning	Lagging immediate attention required	100.0%											
	7 Support	Lagging immediate attention required	81.8%											
	8 Operation	Lagging immediate attention required	85.7%											
	9 Performance Evaluation	Lagging immediate attention required	100.0%											
	10 Improvement	Lagging immediate attention NOT required	78.9%											
ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
7 Support	7.3 Awareness	Jeremy	AM Performance Monitoring & Evaluation	Waylon	19	How does the organization ensure that persons doing work under the organizations control are aware of the how they impact on the achievement of the asset management objectives?	7.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization ensures that all relevant persons are made aware of the asset management policy (e.g. induction courses, communication initiatives, prominent posting of the document) The organization monitors performance and effectiveness of asset management activities and effectively communicates output and trends. All persons are made aware of their contribution towards achieving the asset management objectives and the implications of the work they are doing. The organization has an embedded culture of risk management. All persons working under the organization's control are trained and made aware of the activities they are responsible for, the associated risks and required controls, and opportunities are systematically captured and where appropriate progressed. The organization has necessary controls in place to ensure contractors achieve the same requirements.	Lagging	In regards to 7.3.2 Asset Portfolio; Since a formal asset management program does not exist personnel are not trained on how their work impacts a non-existent program. More specifically, the elements of 7.3.2 a) thru e) are not currently measured or tracked.	Lack of an asset management system/policy with specific training regarding the impacts of knowing the impacts of 7.3.2 a) thru e)	Create an Asset Management System/Policy
7 Support	7.3 Awareness	Jeremy	Resources/Roles & Responsibilities	Jeremy	19	How does the organization ensure that persons doing work under the organizations control are aware of the how they impact on the achievement of the asset management objectives?	7.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization ensures that all relevant persons are made aware of the asset management policy (e.g. induction courses, communication initiatives, prominent posting of the document) The organization monitors performance and effectiveness of asset management activities and effectively communicates output and trends. All persons are made aware of their contribution towards achieving the asset management objectives and the implications of the work they are doing. The organization has an embedded culture of risk management. All persons working under the organization's control are trained and made aware of the activities they are responsible for, the associated risks and required controls, and opportunities are systematically captured and where appropriate progressed. The organization has necessary controls in place to ensure contractors achieve the same requirements.	Lagging	The organization retains key staff that are knowledgeable and competent in their subject areas of influence. They understand their influence on the operations of systems, role in planning projects, identifying risks, and routinely make strong contributions to manage our assets. One of the short comings is that our organization still needs to define the asset management strategy, the asset management objectives and the expectations for the asset management plan(s). The concept of asset management is not currently connected or integrated across the organization. For example preventive maintenance plans, condition assessments and other components of an asset management system are almost stand alone programs at the present time. Therefore, the staff awareness within the organization with regard to how they affect asset management has not been clearly communicated for the awareness of all staff.	The ISO 55001 gap is the absence of an asset management policy, asset management objectives from the corporate level to the department level, and a asset management communication plan/strategy.	The recommendation for closing this Gap is to ensure that our asset management system clearly communicates roles and responsibilities. Ideally, support for asset management would be incorporated into our culture so that each person has an understanding of how their efforts are related to asset management..
7 Support	7.4 Communication	Jeremy	Resources/Roles & Responsibilities	Jeremy	20	How has the organization determined internal and external communication requirements related to assets and asset management system?	7.4	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization ensures that all relevant persons are made aware of the asset management policy (e.g. induction courses, communication initiatives, prominent posting of the document) The organization monitors performance and effectiveness of asset management activities and effectively communicates output and trends. All persons are made aware of their contribution towards achieving the asset management objectives and the implications of the work they are doing. The organization has an embedded culture of risk management. All persons working under the organization's control are trained and made aware of the activities they are responsible for, the associated risks and required controls, and opportunities are systematically captured and where appropriate progressed. The organization has necessary controls in place to ensure contractors achieve the same requirements.	Aligning	Our organization has a number of processes and deliverables through which asset information is communicated and reported at a high level, and in some cases this occurs at a system level. The gap is the organization does not consistently communicate the significance of the identified risks through an asset management structure. We communicate through tier boards, planning documents and in focused efforts. The roles and responsibilities for asset management are not developed across 4700 / 4800; however many individuals know they have a role in asset management. The exchange of information with stakeholders, could be improved it is often through targeted planning efforts, such as F&I Planning activities that information is shared outside the organization. This exchange of information is typically is at a higher level and may not always consider detailed asset information. Our organization could benefit from improving how and when information is to be collected, analyzed, and evaluated. We should also work to continue to improve, implement, and maintain processes for managing its information. Examples include Maximo Asset Information, drawing management (critical drawings), GIS construction records, and other system information. We could improve in the areas to drive efficiency into asset management and other facility management and operational functions. Finally, as an organization we may not have enough detail in our maintenance and financial systems to really understand where excessive costs are occurring so that information can be reported. We do have strong systems in places to meet the expectations of our stakeholders and meet financial reporting requirements. We may want to take a look at link between technical and financial data to improve asset	The ISO 55001 gap is the organization has not fully documented all assets, asset management, asset management system and the organizational objectives. This would allow the organization to incorporate communication requirements and objectivates into our asset management system.to support the achievement of it organizational objectives.	Develop a asset management communication strategy at the corporate level that communicates asset management progress, risks, financials, and related information. The communication strategy could be integrated into the laboratory operating system, or flow down from divisions, to centers to departments, to allow the information to flow role up efficiently.
7 Support	7.5 Information Requirements	Jeremy	AM Performance Monitoring & Evaluation	Waylon	21	What has the organization done to determine what asset management information is required to support its management of assets, the AM System and organizational objectives.	7.5	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	All information identified as required for asset management purposes is defined, along with the sources, quality assurance requirements and processes to manage the information. The information is traceable and consistent, including between financial and non-financial information.	Lagging	In regards to 7.5.2 Asset Portfolio an extremely high percentage of required asset information is not documented (this is especially true of 7.5.2g). Other information noted in 7.5.2 does not exist at all such as criticality, utilization, specific risk, etc.	Lack of an asset management system/policy that acts as an "umbrella" policy as the required asset information comes from many different "silo's" organizations at SNL	Create an Asset Management System/Policy
7 Support	7.5 Information Requirements	Jeremy	Data/Process Documentation	John	21	What has the organization done to determine what asset management information is required to support its management of assets, the AM System and organizational objectives.	7.5	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	All information identified as required for asset management purposes is defined, along with the sources, quality assurance requirements and processes to manage the information. The information is traceable and consistent, including between financial and non-financial information.	Lagging	While elements of the SNL asset management system have been documented, and a variety of data is available to help determine how to allocated limited funding, there is no formal system to determine what specific information is required.	GAP: There is no formal system to determine what asset management information is required to support the SNL asset management system or its objectives.	As part of the development of the AMP and SAMP, SNL should evaluate whether current information in various asset management tools (FIMS, Maximo, BUILDER, CAIS) is adequate to support the asset management system. If necessary, identify missing information and a path forward to gather it.
7 Support	7.5 Information Requirements	Jeremy	Resources/Roles & Responsibilities	Jeremy	21	What has the organization done to determine what asset management information is required to support its management of assets, the AM System and organizational objectives.	7.5	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	All information identified as required for asset management purposes is defined, along with the sources, quality assurance requirements and processes to manage the information. The information is traceable and consistent, including between financial and non-financial information.	Lagging	We have created asset management plan templates and have began this journey to engage in the activity of asset management. The organization has not determined our information requirements to support its assets, asset management, asset management system and the achievement of its organizational objectives. We have a number of processes and systems in place that can be leveraged to form our asset management system, FIMS, Maximo, Builder, ProjectWise each of these system may play a role in our information requirements and the management of information in support of our asset management program. The information has not been integrated into a program.	The ISO 55001 gap is the organization has not determined its information requirements to support its assets, asset management, asset management system and the achievement of its organizational objectives.	The completion of LCAMP documents will define in detail the type of information that is required to support asset management. We also have builder and other requirements that provide information. The first action may be to simply perform a self assessment of asset information and identify gaps. This activity would include the organization working together to develop the required asset information, and help determine where gaps exist.
7 Support	7.5 Information Requirements	Jeremy	Risk Management - 4851	Gabe	21	What has the organization done to determine what asset management information is required to support its management of assets, the AM System and organizational objectives.	7.5	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	All information identified as required for asset management purposes is defined, along with the sources, quality assurance requirements and processes to manage the information. The information is traceable and consistent, including between financial and non-financial information.	Lagging	The organization has identified the need to gather inventory of a system when starting an LCAMP. This data is collected via the various databases and resources including institutional knowledge, ProjectWise for drawings, Maximo for assets, BUILDER, CAIS for project information and warehouse components. However, there is need to formalize this into a process that can be repeated for each LCAMP. The approach has been done on previous LCAMPs, albeit somewhat arbitrarily.	No process exists to establish a systematic way of identifying asset management information.	The new asset management architecture should have framework on how required information should be gathered for the plan. This includes what Information Management systems to pull information from, and how data should be gathered on the asset.

	ISO 55001 Alignment Rating		% Lagging Ratings	Gap Analysis Alignment Rating	IAM Maturity Rating		IAM Maturity Rating Definitions							
	Lagging		86.2%	Lagging	Maturity Level 0/1		The organization has identified the need for this requirement, and there is evidence of intent to progress it.							
	ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3		The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.							
	4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.								
	5 Leadership	Lagging immediate attention required	95.2%											
	6 Planning	Lagging immediate attention required	100.0%											
	7 Support	Lagging immediate attention required	81.8%											
	8 Operation	Lagging immediate attention required	85.7%											
	9 Performance Evaluation	Lagging immediate attention required	100.0%											
	10 Improvement	Lagging immediate attention NOT required	78.9%											
ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
7 Support	7.5 Information Requirements	Jeremy	Risk Management - 4854	Diane	21	What has the organization done to determine what asset management information is required to support its management of assets, the AM System and organizational objectives.	7.5	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	All information identified as required for asset management purposes is defined , along with the sources, quality assurance requirements and processes to manage the information. The information is traceable and consistent, including between financial and non-financial information.	Lagging	The need has been identified. The creation of this team is the first step in determining what asset management information would be required to support the management of assets and organizational objectives	Develop a list of asset information requirements as set forth in 7.5.2 as it aligns with the determined asset management objectives and the organizational objectives.	The AMP will need to establish strategy and planning priorities consistent with corporate objectives and mission delivery. Consideration will need to be given to maintenance and performance activities and the sources for this information. Again, integration is key for establishing the priorities, reporting and integration for the AMP.
7 Support	7.6 Documented Information	Jeremy	Data/Process Documentation	John	22	To what extent has the organization documented information determined as being necessary for the effectiveness of their asset management system?	7.6	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has an asset management system which is documented to match the needs and context of the organization and will ensure its effectiveness. The organization has the documented information specifically required by ISO 55001: - Scope of the system (4.3) - SAMP (4.4) - AM Policy (5.2) - AM objectives (6.2.1) - AM Plans (6.2.2) - how outsourced activities controlled (8.3) - Evidence of: competence (7.2 and 7.6.1); processes carried out as planned (8.1); results of monitoring, measurement, analysis and evaluation (9.1); audits (9.2.2); management reviews (9.3); nonconformities or incidents and results of corrective actions (10.1) The asset management system includes documentation which provides users with direction to the parts of the AM system.	Lagging	Again, while elements of the SNL asset management system have been documented, and a variety of data is available to help determine how to allocated limited funding, there is no formal system to determine what specific information is required to have an effective system. None of the ISO 55001 information has been formally and fully documented.	GAP: SNL does not have a comprehensive asset management system, nor has it documented the information is necessary to measure its effectiveness.	As part of the development of the AMP and SAMP, SNL should evaluate whether current information in various asset management tools (FIMS, Maximo, BUILDER, CAIS) is adequate to determine the effectiveness of the asset management system. If necessary, identify missing information and a path forward to gather it.
7 Support	7.6 Documented Information	Jeremy	Data/Process Documentation	John	23	When creating and updating documented information, how does the organization ensure that information is appropriately identified, formatted, reviewed and approved, and appropriate media is used?	7.6	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Documented information forming part of the asset management system and associated records are controlled to ensure that they are identified, formatted, checked and approved.	Aligning	Facilities and SNL as a whole has a solid document management system. EIMS FileNet is used as a repository for most Corporate records. Facilities also has a dedicated publications group that includes tech writers and an artist to ensure that key documents are properly and consistently formatted. There is also a review process that requires these documents to be updated on a regular basis. Once the SAMP and the other asset management documents are developed, they will be formatted and controlled appropriately. However, until the asset management program is fully developed, program information will not be available.	GAP: SNL has an effective document management system, but does not have a comprehensive asset management plan in place and thus does not ensure that information is appropriately identified, formatted, reviewed or approved.	Once the AMP and SAMP have been developed, use the resources in Department 4801 to create and update the documents, to ensure consistent formatting.
7 Support	7.6 Documented Information	Jeremy	Data/Process Documentation	John	24	Is documented information required by the asset management system controlled, available and suitable for use where and when it is needed?	7.6	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Information required for asset management purposes is available and suitable for use where and when required . This includes processes for the management of information and appropriate enabling information systems as required. All necessary controls are in place to ensure that information required for asset management purposes is adequately protected from loss of confidentiality, improper use and loss of integrity Processes and systems are in place to ensure that information is added, modified, used and disposed of in a controlled manner. The organization has in place adequate provision for the controlled retention and disposal of information. Retention arrangements are appropriate for secure and safe retention of information for its required life. Information of external origin relevant to the AM System is controlled consistent with asset management requirements.	Aligning	Facilities and SNL as a whole have a solid document management system. EIMS FileNet is used as a repository for most Corporate records. It is a web-based system that controls access to documents based on metagroups that are maintained by personnel with knowledge of who should have access. These personnel can access the documentation from any SNL computer or virtual desktop. Only a few personnel have permission to edit these documents; most people have read-only access. Once the SAMP and the other asset management documents are developed, they will be controlled appropriately.	GAP: SNL has an effective document management system, but does not have a comprehensive asset management plan and thus cannot ensure that required information is controlled, available and suitable for use where and when needed.	Once the AMP and SAMP are developed, SNL will use its existing document management system to ensure that required information is controlled, available and suitable for use where and when needed.
8 Operation	8.1 Operational Planning & Control	John	Data/Process Documentation	John	25	What processes has the organisation developed to control the implementation of asset management plans?	8.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Processes, and criteria for them, have been established to control implementation of: - the asset management plan(s); - actions to address risks and opportunities; - preventive and corrective actions to address nonconformities.	Aligning	Facilities does not have a comprehensive asset management plan, but there is a system in place for controlling and implementing some elements of the plan. Department 4801 teams with Facilities leaders and managers to improve customer satisfaction through their use of the Facilities process-based Quality Management System (QMS). Utilizing the QMS processes and helps achieve consistent and predictable results. The department helps plan for business needs, supports major initiatives, and provides centralized resources for requirements management, risk management, publications, process design, training, measures and metrics, audits and assessments, corrective actions, lessons learned, communications, information technology, records, and continual improvement. Once the asset management plan has been developed, it will fall under the 4801 umbrella.	GAP: SNL does not have an asset management plan and thus does not control its implementation.	Once the AMP and SAMP are developed, SNL will use the resources in Department 4801 to implement them.
8 Operation	8.1 Operational Planning & Control	John	Data/Process Documentation	John	26	Can the organization demonstrate it is controlling the processes for implementing its asset management plans, in accordance with the criteria it has established for them?	8.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Operational planning and delivery processes are being controlled in accordance with the specified criteria. Documented evidence provides assurance that processes have been carried out as planned. Risks associated with delivery activities are being managed.	Lagging	This is similar to the previous question. Facilities does not have a comprehensive asset management plan, but there is a system in place for controlling process elements for some functions relating to asset management. Department 4801 uses the Facilities QMS processes and tools to achieve consistent and predictable results. Once the asset management plan has been developed, it will fall under the 4801 umbrella.	GAP: SNL does not have a comprehensive asset management plan and cannot demonstrate that it is controlling implementation processes.	Once the AMP and SAMP are developed, SNL will use the resources in Department 4801 to control them.
8 Operation	8.2 Management of Change	John	Continuous Improvement	Birgitta	27	How does the organization ensure that risks associated with any planned change that can have an impact on achieving asset management objectives are assessed and managed before the change is implemented?	8.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Changes impacting the asset management system are being identified and assessed before a change is implemented.	Aligning	ORG 4700/4800 currently does not take into consideration how changes impacts AM, only Org and Corporate objectives are assessed. Not aware of any continuous improvement process for planned changes.	No AM objectives exist to ensure risks of planned changes are properly assessed and managed.	Once 4000 Centers defines the Asset Management objectives, the AMPs can establish processes/procedure to ensure risks associated with planned changes have been assessed and managed before the change is implemented.
8 Operation	8.2 Management of Change	John	Continuous Improvement	Birgitta	28	How does the organization control planned changes, which can have an impact on achieving the organization's asset management objectives, and mitigate any adverse effects?	8.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization puts controls in place while implementing planned changes, monitors consequences any takes action to mitigate adverse effects.	Lagging	ORG 4700/4800 may control planned changes to mitigate impacts to Org and Corporate objectives, but AM objectives do not exist and thereby are not considered. Not aware of any continuous improvement process at Org level. Corporate level has a Continuous Sandia Improvements application (CSI-a) to capture continuous improvement activities.	No AM objectives exist to control planned changes.	Once 4000 Centers defines the Asset Management objectives, AMPs can contain process controls to manage and mitigate changes that can have an impact on achieving these objectives.
8 Operation	8.2 Management of Change	John	Data/Process Documentation	John	27	How does the organization ensure that risks associated with any planned change that can have an impact on achieving asset management objectives are assessed and managed before the change is implemented?	8.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Changes impacting the asset management system are being identified and assessed before a change is implemented.	Lagging	Facilities has a configuration management system but does not consistently identify risks associated with program changes. As mentioned in Section 4.1 question 1, SNL does have methods in place to identify internal and external issues that might affect our mission, but this flows down to asset management in an inconsistent manner. Facilities has not developed a systematic approach to addressing changes that affect the entire asset management system.	GAP: While Facilities does have a configuration management system, it does not consistently identify how the risks associated with program changes could affect asset management objectives.	Once the objectives are developed in the SAMP, SNL will need to assess current planning processes to ensure they take asset management risks into consideration when considering planned changes to the asset portfolio.



ISO 55001 Alignment Rating		% Lagging Ratings
Lagging		86.2%
ISO 55001 Section Alignment Rating		% Lagging Ratings
4 Organization Context	Lagging immediate attention NOT required	65.2%
5 Leadership	Lagging immediate attention required	95.2%
6 Planning	Lagging immediate attention required	100.0%
7 Support	Lagging immediate attention required	81.8%
8 Operation	Lagging immediate attention required	85.7%
9 Performance Evaluation	Lagging immediate attention required	100.0%
10 Improvement	Lagging immediate attention NOT required	78.9%


Gap Analysis Alignment Rating	IAM Maturity Rating	IAM Maturity Rating Definitions
Lagging	Maturity Level 0/1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.
Aligning	Maturity Level 2/3	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.
Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.

ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging	Aligning	Leading	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
								(IAM) Maturity Level 0/1	(IAM) Maturity Level 2/3	(IAM) Maturity Level 3/4				
8 Operation	8.2 Management of Change	John	Data/Process Documentation	John	28	How does the organization control planned changes, which can have an impact on achieving the organization's asset management objectives, and mitigate any adverse effects?	8.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization puts controls in place while implementing planned changes, monitors consequences any takes action to mitigate adverse effects.	Lagging	Again, Facilities does not have a formal configuration management system that evaluates and controls the impact of changes on asset management objectives. Metrics are kept to estimate the overall condition of assets (DM, FC, etc.) but these are mainly lagging and not proactive.	GAP: While Facilities does have a formal configuration management system to control planned changes that could affect asset management objectives or mitigate them.	Once the objectives are developed in the SAMP, SNL will need to assess current planning processes to ensure they manage and mitigate risks when considering planned changes to the asset portfolio.
8 Operation	8.2 Management of Change	John	Risk Management - 4851	Gabe	27	How does the organization ensure that risks associated with any planned change that can have an impact on achieving asset management objectives are assessed and managed before the change is implemented?	8.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Changes impacting the asset management system are being identified and assessed before a change is implemented.	Lagging	There currently is not a robust method to determine what effects changing any part of the plan would have on achieving asset management objectives. The current LCAMPs that have been done are not far along enough in the process to know what effect on risk changing aspects of the plan has. Risk management is dealt with on a case-by-case basis, but there lacks a consistent system to deal with risk management.	No formal way to assess impact of plan changes exists. Existing LCAMPs can be changed, but activities that are directed by the plans are not systematically compared to how they are outlined in the LCAMP, nor is there a formal change process or a way to determine what risks there are in changing the plan.	A change control process should be established as part of the asset management system. This can be the same process used by SNL for other documents like processes and procedures, or it can be done by a review committee, or another method established by the asset management system.
8 Operation	8.2 Management of Change	John	Risk Management - 4851	Gabe	28	How does the organization control planned changes, which can have an impact on achieving the organization's asset management objectives, and mitigate any adverse effects?	8.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization puts controls in place while implementing planned changes, monitors consequences any takes action to mitigate adverse effects.	Lagging	Currently the organization does not control, at least formally, planned changes that might have an impact on asset management objectives. The objectives haven't been defined to even know what impact changes could have on them. No plan is in place to mitigate adverse effects.	Same as above.	Same as above, as it relates to changing objectives.
8 Operation	8.2 Management of Change	John	Risk Management - 4854	Diane	27	How does the organization ensure that risks associated with any planned change that can have an impact on achieving asset management objectives are assessed and managed before the change is implemented?	8.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Changes impacting the asset management system are being identified and assessed before a change is implemented.	Lagging	Since asset management objectives have not been established, the organization has not developed any protocols for mitigating risk. We do have risk mitigating protocols, they are just not formally aligned with the asset management objective (in title).	Gap: Need to associate current risk mitigating activities with asset management objectives	A risk reporting and change control process will need to be established for assets as it relates to AMP reporting. There are current risk processes in place for other tasks that can easily be applied to the Asset Management Plan.
8 Operation	8.2 Management of Change	John	Risk Management - 4854	Diane	28	How does the organization control planned changes, which can have an impact on achieving the organization's asset management objectives, and mitigate any adverse effects?	8.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization puts controls in place while implementing planned changes, monitors consequences any takes action to mitigate adverse effects.	Lagging	Since asset management objectives have not been established, the organization has not developed any protocols for controlling changes. Again, we do have protocols for controlling changes but they are not formally aligned with the asset management objective.	Gap: Need to associate current change control activities with asset management objectives	A change control process should be established as part of the organizational asset management objective changes. Mitigation activities will need to be established as part of the development.
8 Operation	8.3 Outsourcing	John	AM Performance Monitoring & Evaluation	Waylon	29a	How does the organization assess risks associated with outsourcing of asset management activities, determine and document how the activities and processes will be controlled and integrated into the AM system, and ensure the performance of the outsourced activities is monitored?	8.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has an asset management system which is documented to match the needs and context of the organisation and will ensure its effectiveness. The organisation has the documented information specifically required by ISO 55001: - Scope of the system (4.3) - SAMP (4.4) - AM Policy (5.2) - AM objectives (6.2.1) - AM Plans (6.2.2) - how outsourced activities controlled (8.3) - Evidence of: competence (7.2 and 7.6.1); processes carried out as planned (8.1); results of monitoring, measurement, analysis and evaluation (9.1); audits (9.2.2); management reviews (9.3); nonconformities or incidents and results of corrective actions (10.1) The asset management system includes documentation which provides users with direction to the parts of the AM system.	Lagging	In regards to asset maintenance, Facilities outsources certain maintenance activities with the drivers behind these decisions being resource capability and resource availability. Outsourcing has a well documented process but it is not well integrated into the CMMS and information from the outsourced contractors is hard to come by. To my knowledge risk is not a factor considered when making maintenance outsourcing decisions.	Lack if an asset management system/policy that describes requirements of outsourced asset portfolio work and their deliverables that then make it into the contract documents.	Create an Asset Management System/Policy
8 Operation	8.3 Outsourcing	John	Data/Process Documentation	John	29a	How does the organization assess risks associated with outsourcing of asset management activities, determine and document how the activities and processes will be controlled and integrated into the AM system, and ensure the performance of the outsourced activities is monitored?	8.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has an asset management system which is documented to match the needs and context of the organisation and will ensure its effectiveness. The organisation has the documented information specifically required by ISO 55001: - Scope of the system (4.3) - SAMP (4.4) - AM Policy (5.2) - AM objectives (6.2.1) - AM Plans (6.2.2) - how outsourced activities controlled (8.3) - Evidence of: competence (7.2 and 7.6.1); processes carried out as planned (8.1); results of monitoring, measurement, analysis and evaluation (9.1); audits (9.2.2); management reviews (9.3); nonconformities or incidents and results of corrective actions (10.1) The asset management system includes documentation which provides users with direction to the parts of the AM system.	Lagging	I am not aware of any risk assessments conducted specifically for outsourcing any activities. Facilities does have several contingency plans to deal with situations like labor strikes, but nothing that is specific to asset management. SNL has multiple contracts for most design and construction work and some maintenance activities, and SNL outsources condition assessments and disposition activities for the most part, but performance monitoring is not consistent across contracts. SDRs must assess the contractor in Oracle after approving each invoice, but Facilities has not developed guidelines for doing these assessments, nor are any of the assessment questions specifically related to asset management. Another concern is the difficulty in finding backup contractors - many of our contracts are one deep. If the contractor shuts down or decides to stop supporting SNL, it could take several months to find a replacement and put a contract in place.	GAP: SNL does not have a consistent methodology for assessing risks associated with outsourcing asset management activities to ensure adequate performance on these contracts.	4800 can use the existing SCORE system to evaluate outsourced work. However, given the limited amount of asset management work that is outsourced, this is a low priority.
8 Operation	8.3 Outsourcing	John	Integrated Asset Management	Birgitta	29a	How does the organization assess risks associated with outsourcing of asset management activities, determine and document how the activities and processes will be controlled and integrated into the AM system, and ensure the performance of the outsourced activities is monitored?	8.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has an asset management system which is documented to match the needs and context of the organisation and will ensure its effectiveness. The organisation has the documented information specifically required by ISO 55001: - Scope of the system (4.3) - SAMP (4.4) - AM Policy (5.2) - AM objectives (6.2.1) - AM Plans (6.2.2) - how outsourced activities controlled (8.3) - Evidence of: competence (7.2 and 7.6.1); processes carried out as planned (8.1); results of monitoring, measurement, analysis and evaluation (9.1); audits (9.2.2); management reviews (9.3); nonconformities or incidents and results of corrective actions (10.1) The asset management system includes documentation which provides users with direction to the parts of the AM system.	Lagging	ORG 4700/4800 do retain outside resources via Service Contracts to perform specialty equipment inspections/certifications/PMs on a predetermined yearly cycle. The Contractor's Service Contract documents the SOW activities and internal processes. These contracts are controlled by Sandia's SDR, who also monitors and evaluates Contractor performance. The Inspections/PM WO's are generated from Maximo on a predetermined schedule are part of an integrated AM process. It's unknown if ORG 4700/4800 risk assessment associated with outsourcing to Service Contractors including potential risks (e.g. damage to its reputation) and corresponding control over those risks are limited to existing contract language .	Organization does retain outside resources (via Service Contracts) and their activities are documented and controlled by Sandia's SDR, a risk assessment associated with outsourcing AM activities (e.g. damage to its reputation) and corresponding control over those risks are limited to existing contract language .	The SAMP and/or AMPS should establish a risk assessment process associated with outsourcing AM activities. Should include how they are controlled, monitored, and reported in a AMS application.



ISO 55001 Alignment Rating		% Lagging Ratings	Gap Analysis Alignment Rating	IAM Maturity Rating	IAM Maturity Rating Definitions	
Lagging		86.2%	Lagging	Maturity Level 0/1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	
ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	
4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.	
5 Leadership	Lagging immediate attention required	95.2%				
6 Planning	Lagging immediate attention required	100.0%				
7 Support	Lagging immediate attention required	81.8%				
8 Operation	Lagging immediate attention required	85.7%				
9 Performance Evaluation	Lagging immediate attention required	100.0%				
10 Improvement	Lagging immediate attention NOT required	78.9%				

ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
8 Operation	8.3 Outsourcing	John	Resources/Roles & Responsibilities	Jeremy	29a	How does the organization assess risks associated with outsourcing of asset management activities, determine and document how the activities and processes will be controlled and integrated into the AM system, and ensure the performance of the outsourced activities is monitored?	8.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has an asset management system which is documented to match the needs and context of the organisation and will ensure its effectiveness. The organisation has the documented information specifically required by ISO 55001: - Scope of the system (4.3) - SAMP (4.4) - AM Policy (5.2) - AM Objectives (6.2.1) - AM Plans (6.2.2) - how outsourced activities controlled (8.3) - Evidence of: competence (7.2 and 7.6.1); processes carried out as planned (8.1); results of monitoring, measurement, analysis and evaluation (9.1); audits (9.2.2); management reviews (9.3); nonconformities or incidents and results of corrective actions (10.1) The asset management system includes documentation which provides users with direction to the parts of the AM system. The organization can demonstrate that it has established what needs to be monitored / measured so it can determine whether or not it achieves the intended outcome(s) of its AM system (4.1, 5.1 & 6.1) The organization can demonstrate that it monitors, as specified in ISO 55001: - 4.2 - who its relevant stakeholders are, and what their requirements are with respect to AM - 6.2.1 - its AM Objectives - 6.2.2 (i) - its risks and opportunities - 8.3 - the performance of outsourced activities - 9.3(c) - trends in: nonconformities and corrective actions; monitoring and measurement results; audit results The organization can demonstrate that: - it has considered the most appropriate methods to undertake the monitoring / measurement, so it will obtain valid results. - it has determined what results from monitoring / measurement it needs to retain, and in what form	Lagging	As an organization we have not progressed an asset management plan or strategy to the point of making the determination of what to outsource. As an organization we have decided to outsource some asset management functions. One example is the completion of Condition Assessments. Contracting with outside resources to aid in the development of asset manage plans has been performed on a small scale. As an organization we have not specifically assessed risks associated with outsourcing of asset management activities, and document how the activities and processes will be controlled and integrated into the AM system, and ensure the performance of the outsourced activities is monitored. We have documented these risks and activities for condition assessment in our condition assessment plan, and through the contract with provider.	The ISO 55001 gap is the organization has not fully determined which asset management functions will be outsourced in our asset management system.	The first step in closing this gap is to complete the asset management strategy. This activity would help determine which activities could be outsourced. The next step would be to consider our internal resource constraints and identify opportunities to outsource activities where it makes business sense or other options are not available. The third step would be leverage our processes and existing contracts to incorporate more elements of asset management into the statement of work in support of asset management activities. Be consistent in our approach to gather the right information at the most efficient time in the life cycle of the asset and as PM, CM, and new construction is performed on the asset with either internal or outsourced resources.
9 Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval	Waylon	AM Performance Monitoring & Evaluation	Waylon	30	How has the organization determined what needs to be monitored and measured?	9.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that it has established what needs to be monitored / measured so it can determine whether or not it achieves the intended outcome(s) of its AM system (4.1, 5.1 & 6.1) The organization can demonstrate that it monitors, as specified in ISO 55001: - 4.2 - who its relevant stakeholders are, and what their requirements are with respect to AM - 6.2.1 - its AM Objectives - 6.2.2 (i) - its risks and opportunities - 8.3 - the performance of outsourced activities - 9.3(c) - trends in: nonconformities and corrective actions; monitoring and measurement results; audit results The organization can demonstrate that: - it has considered the most appropriate methods to undertake the monitoring / measurement, so it will obtain valid results. - it has determined what results from monitoring / measurement it needs to retain, and in what form	Lagging	SNL has a PdM program (small), a fairly robust PM program but also operates often in a "break-down" maintenance mode. In regards to 9.1.2.2 Asset Portfolio none of the performance monitoring activities are utilized. SNL has recognized the need to change this and has established an RCM program to this end but it is not widespread enough to warrant an aligning rating.	Lack of an asset management system/policy that at least references a document that describes what assets require monitoring, who analyzes the results and what/who takes action.	Create an Asset Management System/Policy
9 Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval	Waylon	AM Performance Monitoring & Evaluation	Waylon	31	How has the organization determined what information generated via its monitoring and measurement processes needs to be analysed, evaluated and reported?	9.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that it has determined what data and information it is to analyse and evaluate to enable it to report on whether or not it achieves the intended outcome(s) of its AM system (4.1, 5.1 & 6.1) The organization can demonstrate that, as specified in ISO 55001: - it evaluates effectiveness of actions to: (6.1(b)) address risks and opportunities; (7.2) acquire necessary competence - 5.3(f) - Top management has assigned responsibility and authority for reporting on the performance of the AM system to top management. The organization can demonstrate that it has considered the most appropriate methods of analysis and evaluation to use, so it will obtain valid results. The organization can demonstrate that it has determined what results from analysis / evaluation	Lagging	Since there is no formal process that defines what needs to be monitored and measured there is also no formal process detailing who analyzes and evaluates what little is monitored. There is also no process or flow to who this information is reported. This has long been a concern from the PdM craft persons.	Lack of an asset management system/policy that at least references a document that describes who and what is analyzed/evaluated and who this information is reported to.	Create an Asset Management System/Policy
9 Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval	Waylon	Asset Scope/Portfolio Requirements	Waylon	30	How has the organization determined what needs to be monitored and measured?	9.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that it has established what needs to be monitored / measured so it can determine whether or not it achieves the intended outcome(s) of its AM system (4.1, 5.1 & 6.1) The organization can demonstrate that it monitors, as specified in ISO 55001: - 4.2 - who its relevant stakeholders are, and what their requirements are with respect to AM - 6.2.1 - its AM Objectives - 6.2.2 (i) - its risks and opportunities - 8.3 - the performance of outsourced activities - 9.3(c) - trends in: nonconformities and corrective actions; monitoring and measurement results; audit results The organization can demonstrate that: - it has considered the most appropriate methods to undertake the monitoring / measurement, so it will obtain valid results. - it has determined what results from monitoring / measurement it needs to retain, and in what form	Lagging	There is no formal method of determining what needs to be monitored vs. what doesn't	The scope for determining what needs to be monitored rests on three criteria: •stakeholder and other applicable requirements (regulatory, etc.) •asset management objectives •decision making criteria and methodology While there are regulatory reporting requirements being met they are associated with an asset management framework	Document in an asset management plan the method for satisfying the scope of performance evaluation; the what, why, when and who

	ISO 55001 Alignment Rating		% Lagging Ratings	Gap Analysis Alignment Rating	IAM Maturity Rating		IAM Maturity Rating Definitions							
	Lagging		86.2%	Lagging	Maturity Level 0/1		The organization has identified the need for this requirement, and there is evidence of intent to progress it.							
	ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3		The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.							
	4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.								
	5 Leadership	Lagging immediate attention required	95.2%											
	6 Planning	Lagging immediate attention required	100.0%											
	7 Support	Lagging immediate attention required	81.8%											
	8 Operation	Lagging immediate attention required	85.7%											
	9 Performance Evaluation	Lagging immediate attention required	100.0%											
	10 Improvement	Lagging immediate attention NOT required	78.9%											
ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
9 Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval	Waylon	Asset Scope/Portfolio Requirements	Waylon	31	How has the organization determined what information generated via its monitoring and measurement processes needs to be analysed, evaluated and reported?	9.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that it has determined what data and information it is to analyse and evaluate to enable it to report on whether or not it achieves the intended outcome(s) of its AM system (4.1, 5.1 & 6.1) The organization can demonstrate that, as specified in ISO 55001: - It evaluates effectiveness of actions to: (6.1(b)) address risks and opportunities ; (7.2) acquire necessary competence - 5.3(f) - Top management has assigned responsibility and authority for reporting on the performance of the AM system to top management. The organization can demonstrate that it has considered the most appropriate methods of analysis and evaluation to use, so it will obtain valid results. The organization can demonstrate that it has determined what results from analysis / evaluation The organization can demonstrate that it has established what needs to be monitored / measured so it can determine whether or not it achieves the intended outcome(s) of its AM system (4.1, 5.1 & 6.1) The organization can demonstrate that it monitors, as specified in ISO 55001: - 4.2 - who its relevant stakeholders are, and what their requirements are with respect to AM - 6.2.1 - its AM Objectives - 6.2.2 (k) - its risks and opportunities - 8.3 - the performance of outsourced activities - 9.3(c) - trends in: nonconformities and corrective actions; monitoring and measurement results; audit results The organization can demonstrate that: - It has considered the most appropriate methods to undertake the monitoring / measurement, so it will obtain valid results. - It has determined what results from monitoring / measurement it needs to retain, and in what form	Lagging	There is no formal method of determining what needs to be monitored vs. what doesn't what should be reported or not	Lack of an asset management system/policy that describes who and what is analyzed/evaluated and who this information is reported to.	An asset management policy that is created defining the scope of performance monitoring and measurement of the asset portfolio and provides a reporing structure for this information
9 Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval	Waylon	Continuous Improvement	Birgitta	30	How has the organization determined what needs to be monitored and measured?	9.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that it has determined what results from analysis / evaluation The organization can demonstrate that it has established what needs to be monitored / measured so it can determine whether or not it achieves the intended outcome(s) of its AM system (4.1, 5.1 & 6.1) The organization can demonstrate that it monitors, as specified in ISO 55001: - 4.2 - who its relevant stakeholders are, and what their requirements are with respect to AM - 6.2.1 - its AM Objectives - 6.2.2 (k) - its risks and opportunities - 8.3 - the performance of outsourced activities - 9.3(c) - trends in: nonconformities and corrective actions; monitoring and measurement results; audit results The organization can demonstrate that: - It has considered the most appropriate methods to undertake the monitoring / measurement, so it will obtain valid results. - It has determined what results from monitoring / measurement it needs to retain, and in what form	Lagging	There are no formal policies for determining which assets need their performance monitored or measured. Nor are there set performance KPI's, qualitative or quantitative. Sr Mgt has identified the need to formalize and supports 4853 RCM effort under way to evaluate how to establish and implement a plan to improve effectiveness of asset maintenance. Continuous improvement could be part of the plan.	No formal AM policies exist for determining which assets need their performance monitored or measured.	The SAMP and/or AMPS should establish formal criteria and procedures to identify assets monitoring needs and how they will be measured.
9 Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval	Waylon	Continuous Improvement	Birgitta	31	How has the organization determined what information generated via its monitoring and measurement processes needs to be analysed, evaluated and reported?	9.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that it has determined what data and information it is to analyse and evaluate to enable it to report on whether or not it achieves the intended outcome(s) of its AM system (4.1, 5.1 & 6.1) The organization can demonstrate that, as specified in ISO 55001: - It evaluates effectiveness of actions to: (6.1(b)) address risks and opportunities ; (7.2) acquire necessary competence - 5.3(f) - Top management has assigned responsibility and authority for reporting on the performance of the AM system to top management. The organization can demonstrate that it has considered the most appropriate methods of analysis and evaluation to use, so it will obtain valid results. The organization can demonstrate that it has determined what results from monitoring / measurement it needs to retain, and in what form	Lagging	With no formal monitoring/measuring programs underway, there is a lack of an organized approach to determining what information needs/should be collected. Sr Mgt has identified the need and supports the RCM effort under way to provide guidance on the monitored information needed to be analyzed, evaluated and reported for effective asset maintenance. Continuous improvement should be include in whatever approach is decided.	No formal AM monitoring/measuring programs exist	The SAMP and/or AMPS should establish formal processes/criteria to determine what information is collected, how it is generated and captured, and what needs to be analyzed, evaluated, and reported.
9 Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval	Waylon	Data/Process Documentation	John	30	How has the organization determined what needs to be monitored and measured?	9.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that it has established what needs to be monitored / measured so it can determine whether or not it achieves the intended outcome(s) of its AM system (4.1, 5.1 & 6.1) The organization can demonstrate that it monitors, as specified in ISO 55001: - 4.2 - who its relevant stakeholders are, and what their requirements are with respect to AM - 6.2.1 - its AM Objectives - 6.2.2 (k) - its risks and opportunities - 8.3 - the performance of outsourced activities - 9.3(c) - trends in: nonconformities and corrective actions; monitoring and measurement results; audit results The organization can demonstrate that: - It has considered the most appropriate methods to undertake the monitoring / measurement, so it will obtain valid results. - It has determined what results from monitoring / measurement it needs to retain, and in what form	Lagging	Department 4801's QMS includes the development and tracking of various metrics. This group can also conduct audits and assessments and develop corrective actions and lessons learned. Any metrics identified in the asset management plan will be tracked by 4801. Process coordinators in 4801 work with the departments in 4800 to develop and track these metrics. However, comprehensive asset management measures have not been developed, nor has SNL developed a process for determining what measures are most valuable.	GAP: SNL has not developed a methodology for developing comprehensive measures to monitor asset management activities.	4800 needs to develop a methodology for identifying comprehensive measures to monitor asset management activities. Once these measures have been developed, 4800 will use the resources in Department 4801 to monitor these measures.



ISO 55001 Alignment Rating		% Lagging Ratings	Gap Analysis Alignment Rating	IAM Maturity Rating	IAM Maturity Rating Definitions	
Lagging		86.2%	Lagging	Maturity Level 0/1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	
ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	
4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.	
5 Leadership	Lagging immediate attention required	95.2%				
6 Planning	Lagging immediate attention required	100.0%				
7 Support	Lagging immediate attention required	81.8%				
8 Operation	Lagging immediate attention required	85.7%				
9 Performance Evaluation	Lagging immediate attention required	100.0%				
10 Improvement	Lagging immediate attention NOT required	78.9%				

ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
9 Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval	Waylon	Data/Process Documentation	John	31	How has the organization determined what information generated via its monitoring and measurement processes needs to be analysed, evaluated and reported?	9.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that it has determined what data and information it is to analyse and evaluate to enable it to report on whether or not it achieves the intended outcome(s) of its AM system (4.1, 5.1 & 6.1) The organization can demonstrate that, as specified in ISO 55001: - it evaluates effectiveness of actions to: (6.1(b)) address risks and opportunities ; (7.2) acquire necessary competence - 5.3(f) - Top management has assigned responsibility and authority for reporting on the performance of the AM system to top management. The organization can demonstrate that it has considered the most appropriate methods of analysis and evaluation to use, so it will obtain valid results. The organization can demonstrate that it has determined what results from analysis / evaluation The organization can demonstrate that it has established what needs to be monitored / measured so it can determine whether or not it achieves the intended outcome(s) of its AM system (4.1, 5.1 & 6.1) The organization can demonstrate that it monitors, as specified in ISO 55001: - 4.2 - who its relevant stakeholders are, and what their requirements are with respect to AM - 6.2.1 - its AM Objectives - 6.2.2 (i) - its risks and opportunities - 8.3 - the performance of outsourced activities - 9.3(c) - trends in: nonconformities and corrective actions; monitoring and measurement results; audit results The organization can demonstrate that: - it has considered the most appropriate methods to undertake the monitoring / measurement, so it will obtain valid results. - it has determined what results from monitoring / measurement it needs to retain, and in what form	Lagging	This is another task that falls under the umbrella of Department 4801's QMS. The structure is in place to analyze, evaluate and report results, but the AM monitoring and measurement processes have not been developed, and there is little AM information to analyze. Aside from the Facilities Control System and Fire Protection System, few systems are monitored regularly.	GAP: SNL has not developed comprehensive asset management monitoring and measurement processes and thus cannot determine what data needs to be analyzed, evaluated and reported.	Develop comprehensive asset management monitoring and measurement processes to determine what data needs to be analyzed, evaluated and reported.
9 Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval	Waylon	Risk Management - 4851	Gabe	30	How has the organization determined what needs to be monitored and measured?	9.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that it has determined what data and information it is to analyse and evaluate to enable it to report on whether or not it achieves the intended outcome(s) of its AM system (4.1, 5.1 & 6.1) The organization can demonstrate that, as specified in ISO 55001: - 4.2 - who its relevant stakeholders are, and what their requirements are with respect to AM - 6.2.1 - its AM Objectives - 6.2.2 (i) - its risks and opportunities - 8.3 - the performance of outsourced activities - 9.3(c) - trends in: nonconformities and corrective actions; monitoring and measurement results; audit results The organization can demonstrate that: - it has considered the most appropriate methods to undertake the monitoring / measurement, so it will obtain valid results. - it has determined what results from monitoring / measurement it needs to retain, and in what form	Lagging	The organization has determined what needs to be monitored and measured by completing and working on LCAMPs. It is through existing LCAMPs that we have a means what needs to be monitored and measured. This is done on very few systems, and not documented properly, therefore there is much room for establishing guidelines and growing from there. For systems that don't yet have LCAMPs, other methodologies such as RCM and building operational requirements determine what needs to be monitored.	No formal process or system to determine what needs to be measured and monitored. It is done on a case by case basis.	A process should be established to determine what needs to be measured and monitored with regards to the asset being considered for an asset management plan. All information about the asset/system should be identified, and a process should be established to determine what should be monitored and measured. This approach should be the same for all AMPs.
9 Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval	Waylon	Risk Management - 4851	Gabe	31	How has the organization determined what information generated via its monitoring and measurement processes needs to be analysed, evaluated and reported?	9.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that it has determined what data and information it is to analyse and evaluate to enable it to report on whether or not it achieves the intended outcome(s) of its AM system (4.1, 5.1 & 6.1) The organization can demonstrate that, as specified in ISO 55001: - it evaluates effectiveness of actions to: (6.1(b)) address risks and opportunities ; (7.2) acquire necessary competence - 5.3(f) - Top management has assigned responsibility and authority for reporting on the performance of the AM system to top management. The organization can demonstrate that it has considered the most appropriate methods of analysis and evaluation to use, so it will obtain valid results. The organization can demonstrate that it has determined what results from analysis / evaluation	Lagging	Since there isn't a formal process of determining what needs to be monitored and measured, there is no current process of determining what information needs to be analyzed and reported. The LCAMP process is looking to develop metrics and KPIs for analysis, which will be information that would need to be analyzed and reported.	No process to determine what info generated via the monitoring system needs to be analyzed, evaluated, and reported, as it relates to asset management.	The framework of the asset management architecture should include a description of the monitoring system and details about how elements should be analyzed, evaluated, and reported. This should be applied to all AMPs going forward. Metrics and KPIs developed should inform the organization of how to maintain those assets.
9 Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval	Waylon	Risk Management - 4854	Diane	30	How has the organization determined what needs to be monitored and measured?	9.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that it has established what needs to be monitored / measured so it can determine whether or not it achieves the intended outcome(s) of its AM system (4.1, 5.1 & 6.1) The organization can demonstrate that it monitors, as specified in ISO 55001: - 4.2 - who its relevant stakeholders are, and what their requirements are with respect to AM - 6.2.1 - its AM Objectives - 6.2.2 (i) - its risks and opportunities - 8.3 - the performance of outsourced activities - 9.3(c) - trends in: nonconformities and corrective actions; monitoring and measurement results; audit results The organization can demonstrate that: - it has considered the most appropriate methods to undertake the monitoring / measurement, so it will obtain valid results. - it has determined what results from monitoring / measurement it needs to retain, and in what form	Lagging	No determination has been made of what needs to be monitored and measured. We know, from individual perspectives, what information should be monitored for the systems (Life Cycle, preventative maintenance, etc.)	Gap: No formal determination has been made, from an organizational perspective, on what should be monitored and measured, when that should happen and how the information will be analyzed and evaluated. There are movements in that direction but nothing has been formalized in a consistent effort. It is evolving.	Once the Asset Management Objectives are completed, a comprehensive list of stakeholders needs to be established for the purposes of identifying who is responsible for each metric. MAXIMO, FIMS, BUILDER, LCAMP, Site Sustainability Plan and data from 4700 would need to be consolidated to develop a process for monitoring performance (across all assets) and the associated indicators for performance (Capacity and Condition). Timelines for monitoring and evaluation would need to be established. Recent efforts to understand current site capacity for sitewide systems were well received by the SNL leadership but no clear path forward for mitigating the at-risk infrastructure has been established. I believe we have most performance metrics either established or in the initial stages of understanding performance, however, the associated indicators (condition and capacity) are not as fully mature in their development. The SMEs have an understanding of the capacity but no consistent recording that is similar across the site. Granted, there are different weights of measurement but the reporting document is not consistent for each utility. Partnership Planners need to be engaged to determine realtime risks to assets. Most information, in that regard, is tracked through an F&I list that is updated with customer risk.

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	Lagging		86.2%	Lagging	Maturity Level 0/1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.								
	ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.								
	4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.								
	5 Leadership	Lagging immediate attention required	95.2%											
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ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
9 Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval	Waylon	Risk Management - 4854	Diane	31	How has the organization determined what information generated via its monitoring and measurement processes needs to be analysed, evaluated and reported?	9.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that it has determined what data and information it is to analyse and evaluate to enable it to report on whether or not it achieves the intended outcome(s) of its AM system (4.1, 5.1 & 6.1) The organization can demonstrate that, as specified in ISO 55001: - it evaluates effectiveness of actions to: (6.1(b)) address risks and opportunities ; (7.2) acquire necessary competence - 5.3(f) - Top management has assigned responsibility and authority for reporting on the performance of the AM system to top management. The organization can demonstrate that it has considered the most appropriate methods of analysis and evaluation to use, so it will obtain valid results. The organization can demonstrate that it has determined what results from analysis / evaluation	Lagging	The organization has identified a need but there is not a formal monitoring and measuring policy. The organization has Partnership Planners that interface with customers to develop a needs list. It is the customer who has determined the need not the organization. An overarching Organizational prioritization list is needed to determine what asset should be monitored and measured.	Gap: The organization has not determined what needs to be monitored and measured. Individually, groups are determining what information should be monitored and measured and how that information should be generated. Examples of plans that monitor and measure in an informal asset management capacity are the LCAMPS and Site Sustainability Plans.	Again, individual SME's and Partnership Planners are engaged within their independent silos for risk and determining what information should be analysed, evaluated and reported. However that has resulted in evaluation of individual sites and assets rather than assets as a whole. The Organization has taken the initial steps of developing a TA-I Capacity Analysis but that would need to translate across the site and determine a frequency for evaluation. In Deep Dive presentations to funding sponsors we frequently have to present Risk Waterfalls, Performance, Investment, etc. The challenge is that the information has to be cobbled together in a short time frame and then integrated to "tell a story" regarding the infrastructure. It would be beneficial to establish a consistent methodology for producing the information routinely needed and creating an integration model that generates the tables, charts, etc. needed for analysis or presentation.
9 Performance Evaluation	9.2 Internal Audit	Waylon	AM Performance Monitoring & Evaluation	Waylon	32	How does the organization ensure that internal audits are carried out which objectively evaluate whether its AM system conforms to its own requirements and the requirements of ISO 55001, and that the system is effectively implemented and maintained?	9.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has a defined process for the development of its audit programme, and can demonstrate that it will enable it to evaluate whether the AM system has been implemented in compliance with requirements. The priority of what is audited, and the frequency of audits, takes account of the importance of asset management processes and the results of previous audits The organisation has a defined approach to determining the criteria and scope for individual audits. The organisation can demonstrate that its internal auditors are competent in auditing, can objectively assess the activities being audited, and are impartial relative to them. The organisation has defined approach to recording the results of audits, reporting them to management and keeping documentary evidence.	Lagging	An asset management policy does not exist.	An asset management policy does not exist.	Create an Asset Management System/Policy
9 Performance Evaluation	9.3 Management Review	Waylon	AM Performance Monitoring & Evaluation	Waylon	33	What has the organisation's top management done to demonstrate that it reviews the asset management system?	9.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Top management can demonstrate that it has documented a systematic approach to management review, which includes when it will take place. There is documented evidence that management review has taken place e.g. Report(s) and/or minutes of meeting(s).	Lagging	An asset management policy does not exist.	An asset management policy does not exist.	Create an Asset Management System/Policy
9 Performance Evaluation	9.3 Management Review	Waylon	AM Performance Monitoring & Evaluation	Waylon	34	How does the organisation's top management ensure that its reviews of the asset management system consider the relevant inputs and record the results and outputs?	9.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Top management can demonstrate that a systematic approach has been adopted to ensure that information which would be relevant to management review is identified and made available. The evidence that management review has taken place shows that continual improvement and the need to make changes to the AM system were considered.	Lagging	An asset management policy does not exist.	An asset management policy does not exist.	Create an Asset Management System/Policy
10 Improvement	10.1 Nonconformity and Corrective Action	Birgitta	Asset Scope/Portfolio Requirements	Waylon	35	When a nonconformity or incident occurs in its assets or AM system, how does the organization respond and (as applicable) take action to control and correct it and deal with the consequences?	10.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has processes and resources available which enable it to react appropriately to the range of non-conformities or incidents which could occur with its assets or within its AM system.	Lagging	Although responses to nonconformities or incidents (i.e. breakdowns) of our assets is coordinated, handled and documented via the CMMS, in the context of 10.1a-d are lagging or missing entirely	SNL lacks an Asset Management Policy which focuses on improvements in: •Planning •Support •Operations •Performance Monitoring	Create an Asset Management Plan that addresses the ISO improvement areas
10 Improvement	10.1 Nonconformity and Corrective Action	Birgitta	Asset Scope/Portfolio Requirements	Waylon	36	Following the occurrence of a nonconformity or incident, how does the organization evaluate and document whether there is a need for action(s), appropriate to the effects, to ensure that it does not occur or recur elsewhere?	10.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organisation has well understood processes for investigating nonconformities or incidents to determine their cause and whether similar nonconformities exist or could potentially occur. Potential actions are evaluated to determine whether they are appropriate for the effects of, or risks encountered as a result of, the nonconformity or incident. Nonconformities, investigations and actions are documented and records retained compliant with relevant process(es)	Lagging	The severity of the incident determines the need for action. More severe incidents require a formal causal analysis but the majority of nonconformances have little to no follow up action.	SNL lacks an Asset Management Policy which focuses on improvements in: •Planning •Support •Operations •Performance Monitoring	Create an Asset Management Policy that defines the follow up actions to ensure that the non-conformity does not recur for the same asset or other assets
10 Improvement	10.1 Nonconformity and Corrective Action	Birgitta	Asset Scope/Portfolio Requirements	Waylon	37a	Following evaluations which have determined there is a need for corrective or preventive actions, how does the organization implement and document the identified actions (including changes to the AM system), record their results and review their effectiveness?	10.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Effective processes are in place to implement actions resulting from evaluating nonconformities in appropriate timescales, including changes to the asset management system. Progress with implementing actions is monitored .	Lagging	A Computerized Maintenance Management System (CMMS) is in use at SNL and Work Orders are created and tracked through the system. However there are substantial issues with the recording/documenting of results and little to no review of the effectiveness of the actions taken other than work was done to (at least temporarily fix the non-conformity at hand).	SNL lacks an Asset Management Policy which focuses on improvements in: •Planning •Support •Operations •Performance Monitoring	Create an Asset Management Policy that includes and defines the process of what steps are taken following a non-conformity to include: what must be documented and by whom, who reviews and analyses the issues and the effectiveness of the actions taken.

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ISO 55001 Section		ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	Lagging (IAM) Maturity Level 0/1	Aligning (IAM) Maturity Level 2/3	Leading (IAM) Maturity Level 3/4	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
10 Improvement		10.1 Nonconformity and Corrective Action	Birgitta	Risk Management - 4851	Gabe	36	Following the occurrence of a nonconformity or incident, how does the organization evaluate and document whether there is a need for action(s), appropriate to the effects, to ensure that it does not occur or recur elsewhere?	10.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Potential actions are evaluated to determine whether they are appropriate for the effects of, or risks encountered as a result of, the nonconformity or incident. Nonconformities, investigations and actions are documented and records retained compliant with relevant process(es)	Lagging	In general, the organization may evaluate and document where there is a need for action of an incident. It depends on the incident, such as a safety incident where the evaluation is more robust, or an incidence of electrical/mechanical equipment failure, where documentation is on a case-by-case basis. There is not a structured process of ensuring incident does not occur elsewhere, though some type of process may exist at a low level, i.e., "Lessons Learned" document, the establishment of new processes, or modification of processes and procedures.	No process by which to consistently evaluate and document issues of nonconformity, as it relates to asset management.	Same as above.
10 Improvement		10.1 Nonconformity and Corrective Action	Birgitta	Risk Management - 4851	Gabe	37a	Following evaluations which have determined there is a need for corrective or preventive actions, how does the organization implement and document the identified actions (including changes to the AM system), record their results and review their effectiveness?	10.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Effective processes are in place to implement actions resulting from evaluating nonconformities in appropriate timescales, including changes to the asset management system. Progress with implementing actions is monitored .	Lagging	In instances where incidents or nonconformities have been evaluated, the organization may make changes to processes, procedures, or work documents if the incident is common. However, there is no formal process for this and it happens infrequently. The organization is not known to review the effectiveness of the changes on a wide scale. There is a lot of room for growth in developing the correct metrics and KPIs to help monitor the effectiveness of changes.	No process by which to consistently evaluate and document issues of nonconformity, as it relates to asset management.	Same as above, adding that the risk management process should include how progress of responding to incidents/nonconformities is monitored and reported.
10 Improvement		10.1 Nonconformity and Corrective Action	Birgitta	Risk Management - 4854	Diane	35	When a nonconformity or incident occurs in its assets or AM system, how does the organization respond and (as applicable) take action to control and correct it and deal with the consequences?	10.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that it has determined what data and information it is to analyse and evaluate to enable it to report on whether or not it achieves the intended outcome(s) of its AM system (4.1, 5.1 & 6.1) The organization can demonstrate that, as specified in ISO 55001: - it evaluates effectiveness of actions to: (6.1(b)) address risks and opportunities ; (7.2) acquire necessary competence - 5.3(f) - Top management has assigned responsibility and authority for reporting on the performance of the AM system to top management. The organization can demonstrate that it has considered the most appropriate methods of analysis and evaluation to use, so it will obtain valid results. The organization can demonstrate that it has determined what results from analysis / evaluation	Lagging	The need has been identified. Without an Asset Management System in place, no controls have been established for non-conformity.	Gap: Develop Asset Management Plan, Objects and Corrective/Preventative action plans consistent 10.1 and 10.2 and existing Risk Management practices and recording.	Identify what a "non-conformity" or "incident" is as related to the asset. From there, resources will be identified in a formalized document (RACI) that identifies protocols for response and reporting. The organization currently does do incident reporting but I don't believe that the information is necessarily shared to all stakeholders.
10 Improvement		10.1 Nonconformity and Corrective Action	Birgitta	Risk Management - 4854	Diane	36	Following the occurrence of a nonconformity or incident, how does the organization evaluate and document whether there is a need for action(s), appropriate to the effects, to ensure that it does not occur or recur elsewhere?	10.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organisation has well understood processes for investigating nonconformities or incidents to determine their cause and whether similar nonconformities exist or could potentially occur. Potential actions are evaluated to determine whether they are appropriate for the effects of, or risks encountered as a result of, the nonconformity or incident. Nonconformities, investigations and actions are documented and records retained compliant with relevant process(es)	Lagging	The need has been identified. Without an Asset Management System in place, there are no protocols for evaluation or documentation for non-conformity occurrences.	Gap: Develop Asset Management Plan, Objects and Corrective/Preventative action plans consistent 10.1 and 10.2 and existing Risk Management practices and recording.	The organization currently does do incident reporting but I don't believe that the information is necessarily shared to all stakeholders. The only significant reason that this section is not aligning is that it is part of the formalized Asset Management Plan and there is no formalized transmission of information to an identified list of stakeholders.
10 Improvement		10.1 Nonconformity and Corrective Action	Birgitta	Risk Management - 4854	Diane	37a	Following evaluations which have determined there is a need for corrective or preventive actions, how does the organization implement and document the identified actions (including changes to the AM system), record their results and review their effectiveness?	10.1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	Effective processes are in place to implement actions resulting from evaluating nonconformities in appropriate timescales, including changes to the asset management system. Progress with implementing actions is monitored .	Lagging	The need has been identified. Without an Asset Management System in place, there are no protocols for corrective or preventative actions.	Gap: Develop Asset Management Plan, Objects and Corrective/Preventative action plans consistent 10.1 and 10.2 and existing Risk Management practices and recording.	The organization currently does do Preventative Maintenance activities, or at least plans for them, but there doesn't seem to be a clear understanding of how implementation occurs in some regards. For example, an SME may know that some maintenance is needed on lines but only pursues one method for securing funding for the maintenance. It would be beneficial for there to be an understanding on whether a FacPM or Partnership Planner can seek to fund maintenance in an alternative manner. Again, a RACI diagram might assist in at least understanding how preventative actions can be implemented and documented. The only significant reason that this section is not aligning is that it is part of the formalized Asset Management Plan and there is no formalized transmission of information to an identified list of stakeholders.
10 Improvement		10.2 Preventive Action	Birgitta	AM Performance Monitoring & Evaluation	Waylon	38	How does the organisation proactively monitor potential failures in asset performance and evaluate the need for preventive action?	10.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has put in place appropriate means for monitoring the assets and asset systems to identify potential failures in performance. This includes monitoring to identify defects and asset condition that have not yet resulted in functional failure. Requirements are included in relevant specifications and procedures, and evidence including documented information is available.	Lagging	With the exception of some systems/equipment (predominately mechanical) that are monitored by the Facilities Control System (FCS) there are no proactive measures in place to monitor potential failures; even this system is used more for operating status than it is for equipment health. Most failures are identified only after the fact and not found using predictive or performance monitoring approaches.	SNL lacks an Asset Management Policy which focuses on improvements in: a) creating documented information on, and reviewing, past nonconformities; b) evaluating how the consequences were dealt with; c) determining methodologies to prevent future nonconformity.	Create an Asset Management Policy that includes asset performance monitoring criteria.
10 Improvement		10.2 Preventive Action	Birgitta	Continuous Improvement	Birgitta	38	How does the organisation proactively monitor potential failures in asset performance and evaluate the need for preventive action?	10.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has put in place appropriate means for monitoring the assets and asset systems to identify potential failures in performance. This includes monitoring to identify defects and asset condition that have not yet resulted in functional failure. Requirements are included in relevant specifications and procedures, and evidence including documented information is available.	Lagging	From an AM perspective, root cause analysis is typically not performed on asset failures, limiting opportunities for continuous improvements. The standard practice is to perform to Manuf recommended preventative maintenance schedules. RCM Program underway may be addressing these issues. This is topic is good target area for a continuous improvement process.	No proactive AM monitoring exists.	The AM System (AMS) should address Preventative Action gap for assets as a component of the AM Plans as proactive monitoring procedures of asset performance and evaluation processes for determining the asset need for preventative actions. Roles, responsibilities and monitoring criteria should also be defined. These performance monitoring evaluation needs should be documented, recorded, and maintained in an AMS Configuration Mgt application



ISO 55001 Alignment Rating		% Lagging Ratings	Gap Analysis Alignment Rating	IAM Maturity Rating	IAM Maturity Rating Definitions	
Lagging		86.2%	Lagging	Maturity Level 0/1	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	
ISO 55001 Section Alignment Rating		% Lagging Ratings	Aligning	Maturity Level 2/3	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	
4 Organization Context	Lagging immediate attention NOT required	65.2%	Leading	Maturity Level 3/4	The organization can demonstrate that it is systematically and consistently optimizing its asset management practice and achieves it maximum value from managing its assets.	
5 Leadership	Lagging immediate attention required	95.2%				
6 Planning	Lagging immediate attention required	100.0%				
7 Support	Lagging immediate attention required	81.8%				
8 Operation	Lagging immediate attention required	85.7%				
9 Performance Evaluation	Lagging immediate attention required	100.0%				
10 Improvement	Lagging immediate attention NOT required	78.9%				

								Lagging	Aligning	Leading	ISO AM Alignment	ISO Gap Analysis	ISO Gap	ISO Gap Closure Recommendations
ISO 55001 Section	ISO 55001 Subsection	ISO 55001 Section Lead	ISO 55001 Subsection Element	ISO 55001 Subsection Element Lead	IAM Question #	ISO 55001 Assessment (IAM) Question	ISO 55002 AM Assessment Guidance Paragraph	(IAM) Maturity Level 0/1	(IAM) Maturity Level 2/3	(IAM) Maturity Level 3/4				
10 Improvement	10.2 Preventive Action	Birgitta	Data/Process Documentation	John	38	How does the organisation proactively monitor potential failures in asset performance and evaluate the need for preventive action?	10.2	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization has put in place appropriate means for monitoring the assets and asset systems to identify potential failures in performance. This includes monitoring to identify defects and asset condition that have not yet resulted in functional failure. Requirements are included in relevant specifications and procedures, and evidence including documented information is available.	Lagging	Center 4700 does have a preventive maintenance group that uses standard practices to detect equipment failures before they occur - infrared photography, vibration analysis, etc. Craft personnel also perform routes and rounds to look for issues - oil leaks, unusual sounds, etc. However, the program is small for a site the size of SNL/NM. Center 4700 does aim to have a "2:1 ratio of preventive to corrective maintenance, and usually achieves this target, but this only covers routine maintenance activities and not comprehensive asset management. Center 4800 is developing a reliability centered maintenance program to identify key systems that would benefit from additional monitoring. This should improve performance.	GAP: SNL's proactive measures for monitoring comprehensive asset management and performance are inadequate for a site the size of SNL/NM.	SNL needs to develop a process for proactive monitoring of asset performance. This could include working with maintenance to use existing routes and rounds work, installing monitoring equipment, and engaging with systems engineers to identify systems with known issues.
10 Improvement	10.3 Continual Improvement	Birgitta	Continuous Improvement	Birgitta	39	How does the organization demonstrate that it continuously improves the suitability, adequacy and effectiveness of its asset management and asset management system?	10.3	The organization has identified the need for this requirement, and there is evidence of intent to progress it.	The organization has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.	The organization can demonstrate that the suitability, adequacy and effectiveness of its AM system is being continually improved through its processes for monitoring and evaluation, reviews by top management, and the existence of AM objectives and actions designed to improve the system.	Aligning	The organization can demonstrate limited efforts of continuous improvement for AM through WCC's Maximo User requested updates. Improvements have been implemented to the interface and user functionality. There is a cross functional, designated group that oversee the request priorities and implementation process in a systematic way to consistently achieve new requirements.	No AMS has been established to demonstrate effects on the continuous improvement processes.	The AM System (AMS) should address Continual Improvement gap as a component of the AM Plans as processes that would demonstrate continuous improvements to the suitability, adequacy and effectiveness of the AMS. Roles and responsibilities should also be defined. The results should be documented, recorded, and maintained in an AMS Configuration Mgt application.

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4.1 Understanding the Org & Context
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4.2 Understanding needs & expectations
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4.3 Determining Scope of the AMS
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4.4 AMS - Asset Management System
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5.3 Org Roles & Responsibilities
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6.1 Actions to address Risk of AMS
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6 - Planning	6.1 Actions to address Risk of AMS
6 - Planning	6.2 AM Objectives
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6 - Planning	6.2 AM Objectives
6 - Planning	6.2 AM Objectives
6 - Planning	6.2 AM Objectives
6 - Planning	6.2 AM Objectives
6 - Planning	7.1 Resources
7 - Support	7.1 Resources
7 - Support	7.1 Resources
7 - Support	7.1 Resources
7 - Support	7.2 Competence
7 - Support	7.2 Competence
7 - Support	7.2 Competence
7 - Support	7.3 Awareness
7 - Support	7.3 Awareness
7 - Support	7.3 Awareness
7 - Support	7.4 Communication
7 - Support	7.5 Information Requirements
7 - Support	7.5 Information Requirements
7 - Support	7.5 Information Requirements
7 - Support	7.5 Information Requirements
7 - Support	7.6 Documented Information
8 - Operation	8.1 Operational Planning & Control
8 - Operation	8.2 Management of Change
8 - Operation	8.2 Management of Change
8 - Operation	8.2 Management of Change
8 - Operation	8.2 Management of Change
8 - Operation	8.3 Outsourcing
8 - Operation	8.3 Outsourcing
8 - Operation	8.3 Outsourcing
8 - Operation	8.3 Outsourcing
9 - Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval
9 - Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval
9 - Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval
9 - Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval
9 - Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval
9 - Performance Evaluation	9.1 Monitoring, Measurement, Analysis & Eval
9 - Performance Evaluation	9.2 Internal Audit
9 - Performance Evaluation	9.3 Management Review
10 - Improvement	10.1 Nonconformity and Corrective Action
10 - Improvement	10.1 Nonconformity and Corrective Action
10 - Improvement	10.1 Nonconformity and Corrective Action

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10.1 Nonconformity and Corrective Action
10.1 Nonconformity and Corrective Action
10.2 Preventive Action
10.2 Preventive Action
10.2 Preventive Action
10.3 Continual Improvement

ISO 55001/2 Subsection Element**Proposed ISO Subsection Element Leads**

AM & Org Objectives/AM Policy	Pete
AMP/LCAMP/SAMP/Org Plan - 4851	Gabe
AMP/LCAMP/SAMP/Org Plan - 4854	Diane
Asset Management Context	John
Data/Process Documentation	John
Leadership & Commitment	Chris
AM & Org Objectives/AM Policy	Pete
Asset Scope/Portfolio Requirements	Waylon
Leadership & Commitment	Chris
AM & Org Objectives/AM Policy	Pete
AMP/LCAMP/SAMP/Org Plan - 4851	Gabe
AMP/LCAMP/SAMP/Org Plan - 4854	Diane
Asset Scope/Portfolio Requirements	Waylon
Data/Process Documentation	John
Leadership & Commitment	Chris
AMP/LCAMP/SAMP/Org Plan - 4851	Gabe
AMP/LCAMP/SAMP/Org Plan - 4854	Diane
Data/Process Documentation	John
Integrated Asset Management	Birgitta
AM & Org Objectives/AM Policy	Pete
AM Performance Monitoring & Evaluation	Waylon
AMP/LCAMP/SAMP/Org Plan - 4854	Diane
Continuous Improvement	Birgitta
Culture	Pete
Integrated Asset Management	Birgitta
Leadership & Commitment	Chris
Resources/Roles & Responsibilities	Jeremy
Risk Management - 4851	Gabe
Risk Management - 4854	Diane
AM & Org Objectives/AM Policy	Pete
AMP/LCAMP/SAMP/Org Plan - 4851	Gabe
AMP/LCAMP/SAMP/Org Plan - 4854	Diane
Asset Scope/Portfolio Requirements	Waylon
Continuous Improvement	Birgitta
Data/Process Documentation	John
Leadership & Commitment	Chris
AM Performance Monitoring & Evaluation	Waylon
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AMP/LCAMP/SAMP/Org Plan - 4854	Diane
Asset Scope/Portfolio Requirements	Waylon
Resources/Roles & Responsibilities	Jeremy
Risk Management - 4851	Gabe
AM Performance Monitoring & Evaluation	Waylon
Continuous Improvement	Birgitta

Risk Management - 4854	Diane
AM & Org Objectives/AM Policy	Pete
AM Performance Monitoring & Evaluation	Waylon
AMP/LCAMP/SAMP/Org Plan - 4851	Gabe
AMP/LCAMP/SAMP/Org Plan - 4854	Diane
Data/Process Documentation	John
Integrated Asset Management	Birgitta
Leadership & Commitment	Chris
Resources/Roles & Responsibilities	Jeremy
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AMP/LCAMP/SAMP/Org Plan - 4854	Diane
Continuous Improvement	Birgitta
Resources/Roles & Responsibilities	Jeremy
AM Performance Monitoring & Evaluation	Waylon
Data/Process Documentation	John
Leadership & Commitment	Chris
AM & Org Objectives/AM Policy	Pete
AM Performance Monitoring & Evaluation	Waylon
Resources/Roles & Responsibilities	Jeremy
Resources/Roles & Responsibilities	Jeremy
AM Performance Monitoring & Evaluation	Waylon
Data/Process Documentation	John
Risk Management - 4851	Gabe
Risk Management - 4854	Diane
Data/Process Documentation	John
Data/Process Documentation	John
Continuous Improvement	Birgitta
Data/Process Documentation	John
Risk Management - 4851	Gabe
Risk Management - 4854	Diane
AM Performance Monitoring & Evaluation	Waylon
Data/Process Documentation	John
Integrated Asset Management	Birgitta
Resources/Roles & Responsibilities	Jeremy
AM Performance Monitoring & Evaluation	Waylon
Asset Scope/Portfolio Requirements	Waylon
Continuous Improvement	Birgitta
Data/Process Documentation	John
Risk Management - 4851	Gabe
Risk Management - 4854	Diane
AM Performance Monitoring & Evaluation	Waylon
AM Performance Monitoring & Evaluation	Waylon
Asset Scope/Portfolio Requirements	Waylon
Continuous Improvement	Birgitta
Data/Process Documentation	John

Risk Management - 4851	Gabe
Risk Management - 4854	Diane
AM Performance Monitoring & Evaluation	Waylon
Continuous Improvement	Birgitta
Data/Process Documentation	John
Continuous Improvement	Birgitta

ISO Alignment	ISO 55001/2 Section	ISO 55001/2 Section Leads
Lagging	4 Organization Context	Pete
Aligning	5 Leadership	Chris
Leading	6 Planning	Diane/Gabe
	7 Support	Jeremy
	8 Operation	John
	9 Performance Evaluation	Waylon
	10 Improvement	Birgitta

ISO 55001/2 Subsection

- 4.1 Understanding the Org & Context
- 4.2 Understanding needs & expectations
- 4.3 Determining Scope of the AMS
- 4.4 AMS - Asset Management System
- 5.1 Leadership & Commitment
- 5.2 Policy
- 5.3 Org Roles & Responsibilities
- 6.1 Actions to address Risk of AMS
- 6.2 AM Objectives
- 7.1 Resources
- 7.2 Competence
- 7.3 Awareness
- 7.4 Communication
- 7.5 Information Requirements
- 7.6 Documented Information
- 8.1 Operational Planning & Control
- 8.2 Management of Change
- 8.3 Outsourcing
- 9.1 Monitoring, Measurement, Analysis & Eval
- 9.2 Internal Audit
- 9.3 Management Review
- 10.1 Nonconformity and Corrective Action
- 10.2 Preventive Action
- 10.3 Continual Improvement

Subsection Elements

- Asset Scope/Portfolio Requirements
- AM & Org Objectives/AM Policy
- AMP/LCAMP/SAMP/Org Plan - 4851
- AMP/LCAMP/SAMP/Org Plan - 4854
- AM Performance Monitoring & Evaluation
- Culture
- Continuous Improvement
- Data/Process Documentation
- Integrated Asset Management
- Leadership & Commitment
- Asset Management Context
- Resources/Roles & Responsibilities
- Risk Management - 4851
- Risk Management - 4854

ISO Subsection Element Leads

Waylon
Pete
Gabe
Diane
Waylon
Pete
Birgitta
John
Birgitta
Chris
John
Jeremy
Gabe
Diane

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8 Operation

9 Performance Evaluation

10 Improvement

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