Internal Audit

P&M Asset in Service Audit

December 23, 2019

Report Rating: **Effective**

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1.0 EXECUTIVE SUMMARY

1.1 Report Rating and Summary of Findings

Report Rating: **Effective**

No.	Finding	Risk Type	Risk Rating[1]		
			High	Moderate	Low
1	Open Items / Action Requests ("AR") are not classified in a manner to indicate priority.	Operational			x
2	Report for Equipment in Service ("REIS") strategy and key activities are not fully detailed in the Project Management/ Execution Plans.	Operational			x
Total		**2**	**-**	**-**	**2**

1.2 Background

Available for Service ("AFS") is the process used to return equipment and systems back to station operations. It is a quality gate / hold point to ensure that:

- Configuration management of the station and engineering documentation is updated;
- Quality documents and standards have been implemented;
- Project close-out is initiated; and
- Acceptance has been obtained from station operations.

Following the successful commissioning of a modification, the REIS process places these assets 'in service' from an accounting / financial perspective so that OPG has an opportunity to earn a regulated rate of return on capital that is 'used and useful'. Assets 'in service' ("AIS") is a critical milestone for the company as it can affect station operations, revenues (i.e. included into capital cost for rate base) and financial goals, and OPG's social license. Success of the AIS process depends on:

(i) Seamless integration between all stakeholders involved within the process (internal, external and regulators);
(ii) Close monitoring of AIS activities and deliverables; and
(iii) Timely disposition of potential scope changes and open items.

The engagement was a risk-based audit identified in Internal Audit's ("IA") 2019 Audit Plan. It was selected because of the overall importance of placing equipment and systems back in service from an operational and economic perspective.

1.3 Objectives & Scope

The objective of this audit was to perform a review of the AFS and REIS processes related to AIS for P&M's projects to ensure that assets were appropriately accepted by station operations and brought into service in a timely manner.

[1] Please refer to Appendix A for risk rating definitions

In order to achieve the audit objective, we reviewed the processes and tested, on a sample basis, whether:

A. Governance
• Appropriate governance was applied and was reflected in the roles and responsibilities, policies and procedures, reporting requirements and internal/external stakeholder identification and management; • Key stakeholders (including regulators) involved in the AFS process were identified and an appropriate management framework established including meeting cadence and reporting criteria, and sign-off requirements; • A process for review and acceptance/sign-off of AFS documentation was established, which included clear guidance on acceptable and non-acceptable open items, prioritization of open items requiring attention, and timelines for resolution; • Standardized review and surveillance processes were established to reduce review / surveillance timelines.
B. Finance
• The financial completion criteria for each P&M project was established, aligned to governance and clearly communicated to key stakeholders; • Finance and the project team were aligned on key deliverables, i.e. Report of Equipment In-Service ("REIS") form, AFS report and transfer of assets from work-in-progress ("WIP") to in-service capital; • The process for classification of capital assets into the rate base (and WIP to the balance sheet) was established, including documentation requirements, milestones, timing of submission, resource availability for reviews, and lead times for review/ feedback/ authorization.
C. Turnover and Acceptance
• Conditions for acceptance were agreed to with Station Operations (i.e. timing, requirements, and resourcing) and there was clear alignment for station acceptance of AFS completion after Substantial Completion Declaration ("SCD") or AFS report; • Defined plans existed to address open action items and SCD requirements were complete prior to AFS and key stakeholders were in alignment; • Appropriate quality assurance protocols were followed and all quality related issues were addressed prior to putting assets in service; • Key deliverables related to AFS (including timing for acceptance by stakeholders) were identified and tracked within a resource loaded schedule; • All Engineering Change and Master Engineering Change documentation were signed-off as completed, pending any partial AFS; • In case of delays to AFS completion, recovery plans were documented and tracked to ensure recovery activities were achieved.
D. Fraud Risk
No applicable fraud risks identified.

Scope Period: The scope of this audit included activities between October 1, 2018 and September 30, 2019, and included some precursor activities from prior periods.

1.4 Conclusion

Based on our review of the sampled P&M projects, IA found that the AFS and REIS processes were operating effectively. Enhancements to the AFS process can be made by developing a risk graded classification to organize open items for prioritization and close-out in a more structured manner. Additionally, adding more detail of the REIS strategy, including timing and sequencing, into the PMP can improve upfront communication from the project manager to relevant stakeholders.

Positive Observations

- Project governance was applied consistently during the project close-out phase;
- There were a number of controls to ensure the timely placement of assets into service:
    - A strategy memo was issued at project initiation to plan the close-out strategy, AFS, and acceptance by Station Operations if applicable;
    - Monthly meetings were in place with Finance to plan and forecast REIS milestones;
    - There was a robust closeout process that requires input from multiple stakeholders and signatories before the asset is placed into service; and
- Open items were captured in the Asset Suite 7 ("AS7") system and, we observed, based on our project sample, that they were closed in a timely manner (within the six-month timeline post-AFS as required by governance).

Findings & Recommendations

There were no high or moderate rated findings noted during the audit.

The findings noted in this report have been reviewed with management and they have committed to specific action plans. Please refer to Section 2.0 for specific details of the above findings along with the associated risk impact, audit recommendations and management action plans.

Opportunities for Improvement

- Where appropriate, management should further investigate opportunities to capitalize rather than expense project costs incurred during the contractual defects notification period (usually between six months to twelve months post AFS and/or declaring the asset in service). These project costs represent additional expenses relating to warranty or guarantee repairs of equipment, or repairs due to workmanship defects; and
- There is an opportunity to standardise the PMP to ensure the execution strategies are consistent across projects. We observed that the communication plan was not consistently included within the PMPs reviewed.

2.0 DETAILED AUDIT FINDINGS

Internal Audit identified the following detailed findings and recommendations which have been risk rated based on the definitions outlined in Appendix A.

1. Open Items/ARs are not classified in a manner to indicate priority.	**Low**
During project closeout, open items are identified and discussed between the project management team and the operations and maintenance representatives. The open items are captured in Asset Suite ("AS7") and need to be resolved within the six-month timeline post AFS or post declaring the asset in service. Open items are not currently classified based on priority or criticality, e.g. using a system such as A/B/C – 'A' (critical), 'B' (moderate), 'C' (minor). Leading practices recommend developing a system to categorize open items to assist project teams and management to: 1. Assess open items in a standardised manner in order to ensure that critical non-conformances are not accepted prior to AFS; and 2. Focus on rectifying open items in a structured manner compared to the current practice of managing all open items without a graded approach. This will provide more assurance to project management teams as they will have to close all critical open items before proceeding with AFS. Additionally, the categorizing of open items will help project managers plan their resources better to address higher priority open items first.	
Potential Cause & Impact	
Potential Cause: Historically, project management teams focused on closing all open items within the 6 month timeline, regardless of their priority. Potential Impact: Lack of categorization (that drives prioritization) may result in project teams not completing critical open items by milestone dates. They may also miss an opportunity to advance on project timelines by assigning their resources to less significant open items.	
Recommendation	
Management should consider implementing a classification scale based on the priority of open items and develop a process behind it, including key stakeholders that will be involved in the classification.	
Management Action Plan	
P&M management will assess the benefits and feasibility of implementing a classification scale based on priority for AFS open items. Action Owner: Stefan Surdu Target Completion Date: June 30, 2020	

2. REIS strategy and key activities are not fully detailed in the Project Management/ Execution Plans.	**Low**

REIS is a critical milestone following the turnover process, where the asset is capitalized once operations have accepted the modification. Delays to this process could have an impact on the timing of capitalizing the system and including the asset into OPG's rate base. The REIS process is managed by the Project Management Team in conjunction with P&M controllership and the Finance Department.

We observed that project PMP's did not fully detail REIS plans, strategies and/or milestones. In particular, with projects having multiple turnovers (e.g. same modification performed on 4 units over several shutdowns), there is no REIS strategy defined for circumstances where partial turnover of assets would lead to partial REIS's. Including the REIS in the PMP, with the breakdown of partial or full REIS as milestones, would improve communication between stakeholders to improve REIS tracking at a portfolio level and to capitalize assets in a timely manner.

Potential Cause & Impact

Potential Cause:

The REIS process is approached independently from the project turnover process. However, there are monthly meetings between the P&M controllership and P&M Project Teams to plan and forecast for upcoming REIS's.

Potential Impact:

Most projects managed by P&M have long durations and can have multiple REIS's that can lead to changes in team compositions and execution strategies. In these cases, lack of an early definition of the REIS strategy and not having a clear baseline can delay the REIS and/or result in coordination issues between stakeholders.

Recommendation

Management should consider including more detail around the REIS strategy and milestones into PMP's.

Management Action Plan

P&M management will review the PMP template and assess the benefits and feasibility of adding more detail around the REIS strategy and milestones.

Action Owner: Stefan Surdu
Target Completion Date: July 31, 2020

APPENDIX A – RATING DEFINTIONS FOR AUDIT REPORTS

Finding: *Noted deficiency with potential impacts to the achievement of business unit/process area objectives, assessed using the following criteria:*

	High Risk	Moderate Risk	Low Risk
Financial	• Potential loss or financial impact =>5% of the sample population's value, or the department's OM&A budget if the former is unavailable.	• Potential loss or financial impact >=2% and <5% of the sample population's value, or department's OM&A budget if the former is unavailable.	• Potential loss or financial impact <2% of the sample population's value, or department's OM&A budget if the former is unavailable.
Operational Excellence	• Governance non-compliance or lack of/inadequate controls that may impact achievement of business or project objectives. • Errors in or insufficient internal reporting that drives senior management decision making. • Test results where =>25% of the sample had deficiencies in the execution of a key control.	• Governance non-compliance or lack of/inadequate controls with alternate controls in place to mitigate the impact to business or project objectives. • Errors in or insufficient internal reporting that could affect management decision. • Test results where >=10% and <25% of the sample had deficiencies in the execution of a key control.	• Governance compliance with procedural concerns or documentation issues which could impact OPG's ability to demonstrate appropriate due diligence. • Errors in or insufficient internal reporting that has minimal decision making impact. • Test results where <10% of the sample had deficiencies in the execution of a key control.
Safety & Social License	• Regulatory non-compliance. • Deficiencies that could result in: ○ Fatality, permanent disability, or lost time injury; ○ Data loss or unavailability of critical systems; ○ Security is compromised in sensitive / multiple areas; or ○ Fraud / theft.	• Insufficient evidence to support regulatory compliance. • Deficiencies that could result in: ○ Minor injury with no lost time; ○ Temporary data loss or unavailability of non-critical systems; ○ Security is compromised; or ○ Fraud / theft with some mitigating controls.	• Documentation improvements to support regulatory compliance. • Deficiencies that could result in incidents that do not require medical treatment.

Opportunity for improvement: *Observation with no risk impact that is provided to management for consideration to improve efficiency of processes and documentation (e.g. automation, duplication of activities).*

OVERALL REPORT RATING SCALE

An overall audit rating is assigned based on the number of observations identified for the audit and their assigned risk rating:

	Number of Findings			
Finding Risk Rating	**1**	**2**	**3 - 4**	**=> 5**
High	Requires Improvement	Not Effective	Not Effective	Not Effective
Moderate	Generally Effective	Generally Effective	Requires Improvement	Not Effective
Low	Effective	Effective	Generally Effective	Requires Improvement

APPENDIX B – PROCESS OWNER & DISTRIBUTION LIST

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