

**Undertaking 107**

**Provide PMI audit reports from 2011, 2013 and 2015.**

See attached Undertaking 107, Attachments 1, 2 and 3, which are the PMI audit reports from 2011, 2013, and 2015.



**17895-000  
2011 P.E.T.S.  
PM Benchmarking Report**

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## **Executive Summary**

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### **Overview**

This report is to provide the written summary in regards to the 2011 Project Management Benchmarking Study performed on the Project Management systems in use by the Nalcor P.E.T.S. Group. In approximately March 2011 Stantec was asked to provide an overview review of the current Project Management Manual (PMM) and associated systems in order to provide a Benchmark for comparative and improvement purposes. Stantec kicked off this review with Nalcor's team in the Nalcor Office the week of April 13, 2011, which included an onsite review of the PMM & overall PM Program with comparative focus on the Project Management Body of Knowledge (PMBok) Fourth Edition. An Initial Summary report of observations gathered during this session was issued April 26, 2011.

Following the initial PMM review session a follow-up Projects review was conducted the week of July 19, 2011. The Projects review consisted of discussion with the Project Manager of each of 3 projects and topics were discussed that had focus on findings of the April 2011 initial summary and with an underlying focus to obtain necessary knowledge to complete an online Survey hosted by PMI.org on PM Benchmarking.

### **Summary**

The Nalcor P.E.T.S. Group is continuing to development and transition from original inception in 2010. Overall the group is performing on average with regards to Project Management Methodology and Project Execution. Accordingly the results of the PMI.org online PM Benchmarking Survey resulted in the P.E.T.S. Group obtaining a 65% in compliance to the PM Knowledge Areas scoring as follows:

1.	Project Scope Management	80%
2.	Project Human Resource Management	65%
3.	Project Risk Management	46%
4.	Project Communications Management	80%
5.	Project Procurement Management	85%
6.	Project Time Management	46%
7.	Project Integration Management	63%
8.	Project Cost Management	100%
9.	Project Quality Management	33%

The above results are consistent with the findings from the initial April Program Review and the observations gathered during the July 2011 Projects Reviews.

The Top three (3) areas found for greatest need for process improvement focus are Quality, Risk and Time/Plan Management.

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## 1.0 Project Description

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### 1.1 PROJECT OVERVIEW

A specific group within Nalcor has been created to oversee and execute capital projects both for the Regulated and Non-Regulated business sectors. This group is known as the “Project and Execution Technical Services Team” or P.E.T.S. for short. The creation of such a team also involves the review of processes and procedures that are in place and being followed. A review needed to assess the effectiveness and if appropriate for the works being performed. As part of these overall procedures the area of important focus of the P.E.T.S. group are those that focus on Project Management.

In approximately March 2011 Stantec was asked to provide an overview review of the current Project Management Manual (PMM) and associated systems to provide a Benchmark for comparative and improvement purposes. Stantec kicked off this review with Nalcor's team in the Nalcor Office the week of April 13, 2011, which included an onsite review of the PMM & overall PM Program with comparative focus on the Project Management Body of Knowledge (PMBok) Fourth Edition. An Initial Summary report of observations gathered during this session was issued April 26, 2011.

Following the initial PMM review session a follow-up Projects review was conducted the week of July 19, 2011. The Projects review consisted of discussion with the Project Manager of each of 3 projects and topics were discussed that had focus on findings of the April 2011 initial summary and with an underlying focus to obtain necessary knowledge to complete an online Survey hosted by PMI.org on PM Benchmarking.

## **2.0 Reviews and PMI Survey Information**

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### **2.1 INITIAL REVIEW IN APRIL 2011**

During the week of April 13, 2011 a complete review of the Nalcor Project Management Manual (PMM) and associate policies and procedures was performed and the initial findings of this review was reported in a summary report issued on April 26, 2011 and is included in appendix A for review. The three (3) areas noteworthy for improvement as taken from that report were:

1. Project Risk Management. (PMBOK Chapter 11). The PMM does not have nor references a specified policy or procedure to follow in respect to Risk Management.
2. Project Quality Management (PMBOK Chapter 8). The PMM does have Policy 08.01 that outlines Quality Assurance however it does not mention Quality control nor is there a plan developed to manage Quality.
3. Project Management Plan (PMBOK Chapter 3). A Project specific Project Management Plan (or otherwise referred to as Project Execution Plan or (PEP) should be developed for every project. The PMM does not mention this requirement however does provide the PM with flexibility to determine best requirements for the project. These selections should be documented in a PEP.

### **2.2 PROJECTS REVIEWS CONDUCTED JULY 2011**

During the week of July 19, 2011 project reviews were conducted on three (3) selected P.E.T.S. Projects that were currently underway. The Projects review consisted of discussion with the Project Manager of each of 3 projects and topics were discussed that had focus on findings of the April 2011 initial summary and with an underlying focus to obtain necessary knowledge to complete an online Survey hosted by PMI.org on PM Benchmarking.

The three (3) Projects reviewed were selected based on the underlying criteria of that each was to be currently in progress and either of, multidiscipline with a seasoned Project manager, or newer Project Manager with a primarily single discipline team, or an intermediate long term project. These criteria were set to select projects that are applicable to the current processes and to gain insight of a broad range of knowledgebase of the Project Mangers in procedures compliance and also to find process improvement commonalities that are not project size or work experience biased.

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Copies of the project review observations are included in appendix “C”. The findings of the Project Review Sessions have commonly identified the greatest areas for improvement as follows:

1. Checklist item “F” Quality Assurance Plan
2. Checklist item “K” Risk Management Plan
3. Checklist items “D” and “E” Project Planning

When characterized against the initial summary we can see that the observations are very similar to the findings in April.

### **2.3 PMI PM BENCHMARKING SURVEY**

In support of the Procedures review and the Projects review previously discussed the Project Management Institute (PMI) has an online PM Benchmarking Survey available for PMI members to use to assess their company’s relevant performance against the standard methodology as outlined in the Project Management Body of Knowledge. I as a PMI member have completed this survey on behalf of the Nalcor P.E.T.S. Group using the available information observed from time spent within the group and through these review sessions. The report can be found in Appendix “D” along with a copy of the questions and descriptions on how they were responded. The additional information only available by online review has been captured here for reference only to better assist with understanding the report.

What can be observed from the completion of this survey is consistent with the review sessions and the three PMI knowledge areas that should be focused on for improvement are:

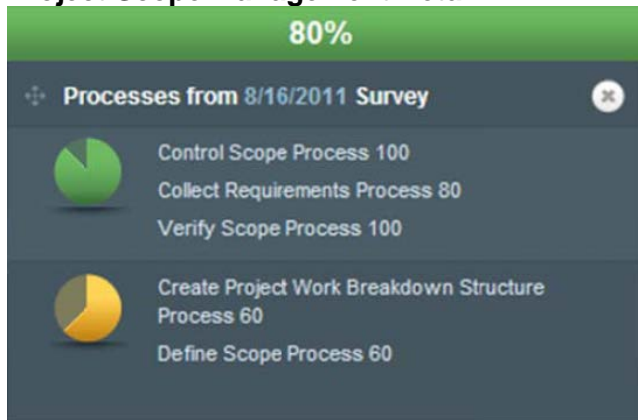
- |    |                            |         |     |
|----|----------------------------|---------|-----|
| 1. | Project Risk Management    | scoring | 46% |
| 2. | Project Time Management    | scoring | 46% |
| 3. | Project Quality Management | scoring | 33% |

**Online PMI Benchmarking Survey results data**

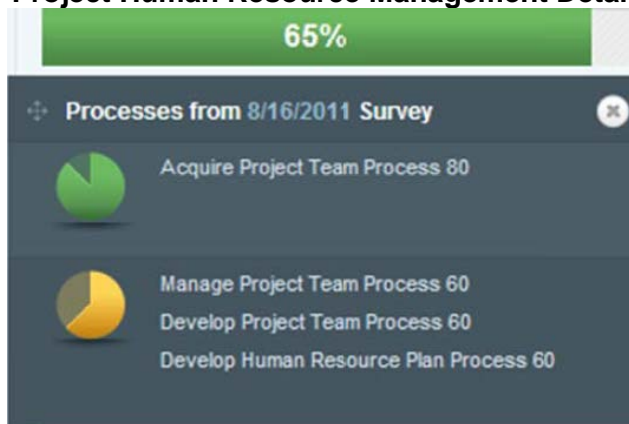
KNOWLEDGE AREA	SURVEY DATE	SURVEY RESULTS	
Project Scope Management	8/16/2011	 80%	<i>More about Knowledge Area</i> The processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. See Ch. 5 of The PMBOK® Guide
Project Human Resource Management	8/16/2011	 65%	<i>More about Knowledge Area</i> The processes that organize, manage, and lead the project teams comprised of the people with assigned roles and responsibilities for completing the project. See Ch. 9 of The PMBOK® Guide.
Project Risk Management	8/16/2011	 46%	<i>More about Knowledge Area</i> The processes of conducting risk management planning, identification, analysis, response planning, and monitoring and control on a project. See Ch. 11 of The PMBOK® Guide
Project Communications Management	8/16/2011	 80%	<i>More about Knowledge Area</i> Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide
Project Procurement Management	8/16/2011	 85%	<i>More about Knowledge Area</i> The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.
Project Time Management	8/16/2011	 46%	<i>More about Knowledge Area</i> Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.
Project Integration Management	8/16/2011	 63%	<i>More about Knowledge Area</i> The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide
Project Cost Management	8/16/2011	 100%	<i>More about Knowledge Area</i> The processes involved in estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide
Project Quality Management	8/16/2011	 33%	<i>More about Knowledge Area</i> The processes and activities that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. See Ch. 8 of The PMBOK® Guide



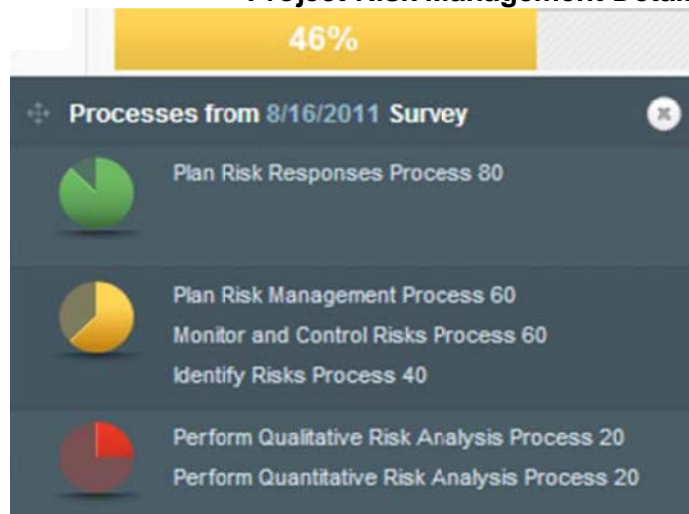
### Project Scope Management Detail



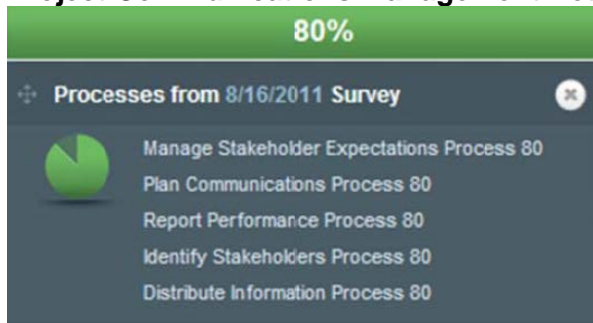
### Project Human Resource Management Detail



### Project Risk Management Detail



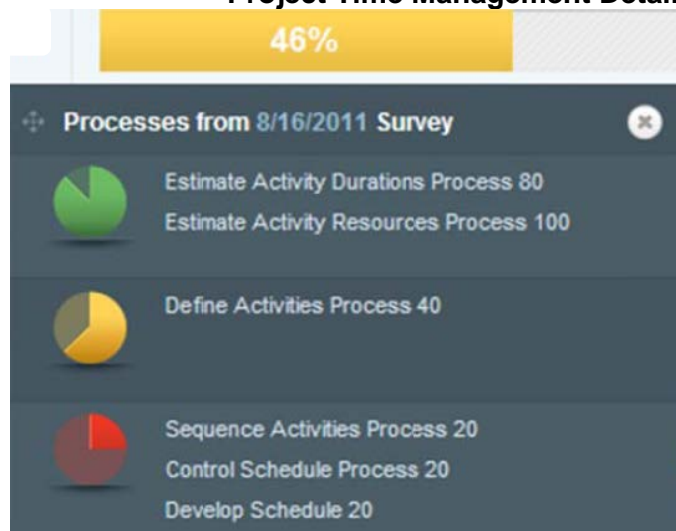
### Project Communications Management Detail



### Project Procurement Management Detail



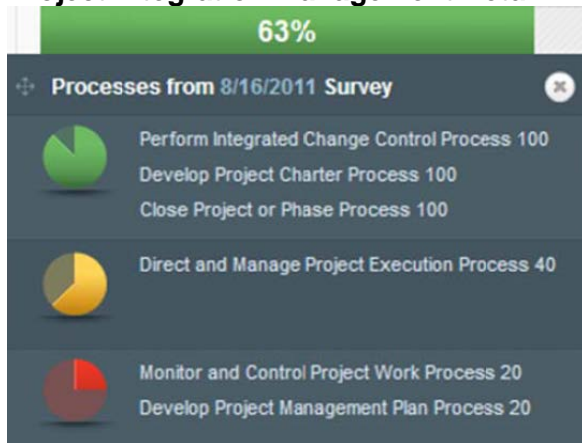
### Project Time Management Detail



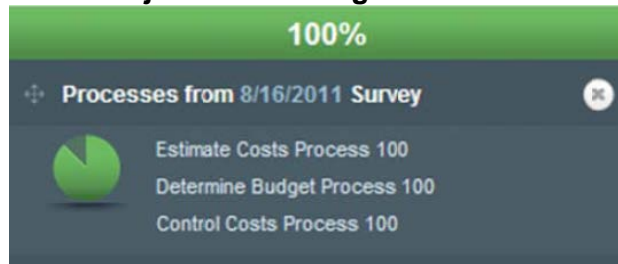
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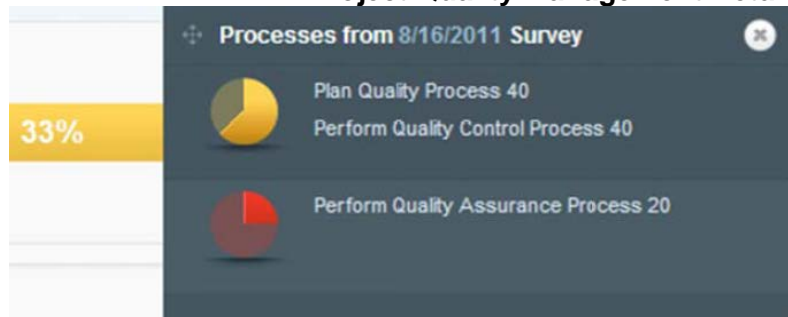
**Project Integration Management Detail**



**Project Cost Management Detail**



**Project Quality Management Detail**



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### **3.0 Reviews**

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#### **3.1 KICK OFF MEETING**

A Kick off Meeting was conducted as follows:

Date: April 13, 2011

Location: Nalcor's Office, St. John's, NL.

#### **3.2 PROJECT REVIEWS**

In progress review meetings were conducted as follows:

Date: July 20/21/22, 2011

Location: Nalcor's Office, St. John's, NL.

Attendees: Alberta Marche, Greg Reed, Todd Collins, Lisa Kingsley, Keir Fiske (STN)

## **4.0 Recommendations**

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The extent of this effort was to provide a Benchmark for the P.E.T.S. Group to use to see how they are in relation to Project Management Procedures and Processes. The measurement against a recognized Project Management authority such as the Project Management institute and the guiding principles of the PMBoK is a valuable comparison.

The Nalcor P.E.T.S. group has in place and is following a comprehensive Project Management Manual in addition to other related standards. These review session have pointed out a few key areas of focus for improvement that should be tabled for process improvement. And it is recommended that a level of priority should be given as follows;

1. Develop a policy and procedure that requires that a Project Specific Execution Plan (PEP) be developed for each and every project to a detail appropriate to the project. This plan would incorporate the existing Project Design Transmittals however would encompass the remaining methodology that the Project manager elects to do to manage the project as applicable such as. A sample detailed PEP Table of contents is included in appendix "E" for reference.
2. Develop a policy and procedure for the requirements to manage risks on projects. This would include an initial project risk review and an ongoing record of risks and mitigation plans recorded on a risk register. For further specific detail referring to PMBoK Chapter 11 would assist.
3. Develop a policy and procedure for the requirements of overall Project Quality Management. This includes not only design quality but overall assurance the project procedures are being followed. This would be an expansion to the existing PMM Policy 08.01 and should be included in every PEP. For further specific detail referring to PMBoK Chapter 8 would assist.
4. Schedule and project timeline planning should be improved on development. Regular progress monitoring is paramount to the project manager having the most current and up to date status of project tasks and impact of changes to sequence of activities. It is suggested that a guideline be added to the PMM that outlines the minimum level of schedule detail is developed for every project.

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## **5.0 Appendices**

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**Appendix A April 2011 PM Benchmarking Summary Report**

**Appendix B April 2011 Summary Notes**

**Appendix C July 2011 Project Review Notes**

**Appendix D PMI PM Benchmarking Survey Information**

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# APPENDIX A

April 2011 PM Benchmarking Summary Report

# PM Benchmarking

## Initial review session Summary report

### April 26, 2011

#### Summary Overview

This Project Management Benchmarking exercise was initiated on April 13, 2011 in the Nalcor St. John's Newfoundland office. The initial session was to obtain a copy of the procedures used to govern the practice of Project Management for all capital and operating projects of the Nalcor Business. Reviewer was provided the following list of documents to use in the review;

- Project Management Manual (printed and PDF Copy of online database)
- Engineering Services – Project Management Process (Flowchart)
- Table of Contents of the Work Execution Implementation Manual
- Table of Contents of the Hydro Group Policies and Procedures Manual
  - *(ToFC's only for reference and were requested because they are both refer in the Project Management Manual)*

The initial session included a review on the procedures and providing a comparative analysis to the Project Management Body of Knowledge (PMBOK) Fourth Edition. The Comparison that is recorded in this summary report was compiled with focus on the Nine Project Management Knowledge areas that are outlined in Chapter 3 of PMBOK (Table 3.1 pg 43).

The initial comparison results can be found in the table attached however to there are 3 areas that are noteworthy for improvement. These are;

- Project Risk Management. (PMBOK Chapter 11). The PMM does not have nor references a specified policy or procedure to follow in respect to Risk Management.
- Project Quality Management (PMBOK Chapter 8). The PMM does have Policy 08.01 that outlines Quality Assurance however it does not mention Quality control nor is there a plan developed to manage Quality.
- Project Management Plan (PMBOK Chapter 3). A Project specific Project Management Plan (or otherwise referred to as Project Execution Plan or PEP) should be developed for every project. The PMM does not mention this requirement however does provide the PM with flexibility to determine best requirements for the project. These selections should be documented in a PEP.

#### Review Table Record

(Initial Suggestions imbedded in ***bold and italicized***)



NALCOR - PM Benchmarking Review Notes April 14 & 15 2011		
	REVIEW ITEM and PMM Review notes	Relevant PMBOK Recommendations.
A	<p><b>External Process Identifying a Project (NEED)</b> INCEPTION PHASE Reference Policy 02.04 Project Life Cycle Activities: INCEPTION, Identify need, Appoint PM, Assemble team, Define purpose and objectives</p>	<p>The best reference to this is the early phases of the PMBOK Initiating process group. There are no recommendation on how this should be done. However as the primary input to every project it is a vital part of further project planning and development.</p>
B	<p><b>Project Charter. (Does Charter Identify Stakeholders?)</b> Policy 05.01 references form "Project Design Transmittal" Policy 02.04 identifies as an activity of inception phase to "define purpose and Objectives"  - The Project Design Transmittal does seem to initiate the project well however I will need to review a sample of this document to see if it does indeed represent a project Charter.</p>	<p>Section 4.1 outlines the recommendations for a project charter.</p> <p><b>Key Points to include</b> 1) Statement of work 2) Why project is needed 3) Approval for work to proceed 4) risks and impact issues 5) Stakeholders identified 6) communicated to team.</p>
C	<p><b>Team selection / assignment</b> 06.11 Project Design Development, identifies the procedure as Relevant Supervising Manager appoints the PM, PM then consults the supervisory team to obtain suitable team members.  Observed Functional level reporting with Project assignment. PMI categorizes as week to balanced Matrix Organization type. (PMBOK 2.4.2 pg 28)</p>	<p>PMBOK Executing Process Group Section 3.5 as well as 4.3. the need is to Staff, Train and Manage the project team and staffing with the proper qualified personnel is recommended. The type of organizational structure will govern the PM's ability to select staff or be assigned staff.</p> <p>No suggestion at this current time as the Nalcor structure can change with the demand of projects.</p>
D	<p><b>Project Specific Execution Plan.</b> Really Need a Sample Study Scope Statement? Policy 06.12</p>	<p>Project Management Plan (PMBOK Chapter 3). A Project specific Project Management Plan (or otherwise referred to as Project Execution Plan or PEP) should be developed for every project. The PMM does not mention this requirement however does provide the PM with flexibility to determine best requirements for the project.</p> <p>SUGGEST These selections should be documented in a PEP</p>
E	<p><b>Scheduling &amp; Time control. Identification of deliverables?</b> Policy 06.14 identifies in .1b The Master Schedule is used as the basis for monitoring both Schedule Performance and Cost Performance.  06.42 identifies the Status reporting including updates of the Schedule. Details and levels of schedule are not apparently defined other than PM is responsible to see is sufficient. Can lead to under developed schedules /plans.</p>	<p>Chapter 4.4 identifies the recommended practice of monitoring and Controlling the Work, including the measurement of performance and providing forecasting results.</p> <p>Chapter 6 - Project Time Management Chapter 7 - Project Cost Management</p> <p>SUGGEST that a guideline of schedule detail is added to the PMM to ensure a minimum level of trackability is maintained for all projects. This would be a little less chance of having an under developed schedule.</p>
F	<p><b>Project Quality Management</b> Policy 08.01 represents the practices got QA program. Very short write-up? Will need to look closely at the PMBOK on this one</p>	<p>Project Quality Management (PMBOK Chapter 8). The PMM does have Policy 08.01 that outlines Quality Assurance however it does not mention Quality control nor is there a plan developed to manage Quality.</p> <p>SUGGEST A Quality Control section of the PMM be developed to follow the process outlined in PMBOK Chapter 8 including recording and frequency of control checking.</p>
G	<p><b>Procurement &amp; Contract Management</b> Contract Management Policy 06.50, and Purchasing policy 10.30. Tendering Process is clearly defined in 06.54 &amp; 06.55</p>	<p>This section involves some of PMBOK Chapter 5 (Project Execution Management) and all of Chapter 12 (Project Procurement Management)</p> <p>Contracting and Procurement are highly governed on practice by legal requirements, my review of the PMM found that it includes details that meet and surpass the PMBOK recommendations and resulting outputs.</p>
H	<p><b>Budget Control</b> Policy 06.40 outlines the reporting and tracking criteria, 06.42 is Project Status Reporting &amp; 06.43 is for the overall financial cost reporting.</p>	<p>Primarily in reference to PMBOK Chapter 7 - Project Cost Management.</p> <p>With the PMM integrating Cost Control and measurement with the Schedule and a financial in house accounting tool I cannot comment to any suggestions for improvement on these policies at this time.</p>
I	<p><b>Communications Plans &amp; Responsibility identifications</b> Policy's 04.01 PM Responsibilities &amp; 04.02 Team Responsibilities identify the responsibilities of the PM &amp; Project team clearly. 04.04 Summarizes nicely and outlines reporting requirements.</p>	<p>PMBOK Chapter 3.4.14 - Plan Communications PMBOK Chapter 10 - Project Communications Management</p> <p>SUGGEST Although the PMM does address role responsibilities it was not found anywhere where a project specific responsibility plan. As well no Project Specific Communications plan was noted in the PMM review. It is recommended that a Responsibility Assignment Matrix or RACI Chart be required for all projects to appropriate level of project details and included in a Project Execution Plan. (RACI stands for Responsible, Accountable, Consulted, and Informed)</p>

NALCOR - PM Benchmarking Review Notes April 14 & 15 2011		
<b>J</b>	<p><u>Change Management Plan / Process.</u> 06.58 identifies the contract change process. CCO/COA process 06.11 identifies the design change process. JC CO process.</p> <p>ALL Project change that has a cost impact must receive approval in the Job Cost (Now Capital Budget) Change Process.</p>	<p>Each knowledge area of PMBOK has a control of change component. Whereby identification, record, impact measurement, mitigation and approval of change needs to be performed. The PMM identifies the process required to manage and control change appropriately.</p>
<b>K</b>	<p><u>Risk Management Plans / Process</u> Have not located reference to a Policy or procedure in the PMM. I did find in 06.42 Project Status Report includes risks/Issues and mitigation measures. And in 06.51 Procurement Packaging that RISK needs to be considered.</p>	<p>Project Risk Management. (Pombo Chapter 11). The PMM does not have nor references a specified policy or procedure to follow in respect to Risk Management.</p>
<b>L</b>	<p><u>Project completion validation process</u> 06.06 Contract completion outlines the requirements. No specific mention of punch lists however there is noted written acceptance.</p>	<p>Assurance of all the required Works have been completed, All PMBOK Knowledge areas. Written acceptance of all contract is appropriate for all contracts / procurements.</p> <p><i>SUGGEST that the PEP be developed with a completion validation checklist or other record/tool the PM can use to validate overall scope completion.</i></p>
<b>M</b>	<p><u>Project Closeout</u> 11.01 and 11.02 provide the necessary guideline to close a project and perform a post implementation report, along with a lesson learned collection and summary record. No indication if data is carried in any way to a practice / policy / procedure improvement initiative.</p>	<p>PMBOK Closing Process Group - Section 3.7</p> <p>PMM outlines very well the requirements to close a project entirely. Exception is there is no reference for how the lessons learned can get carried forward for other projects to use in planning process.</p> <p><i>SUGGEST that the PMM include a method for the lessons learned information to be communicated or made available for future projects to reference in planning phase.</i></p>

### Next Steps

- Attend Nalcor Offices on May 30 – June 1 to perform a project reviews on 3 or 4 active or completed projects and note PMM implementation.
- Record further notes while on site.
- Populate the PMI Project Management Benchmark survey on Nalcor behalf based on findings, and include in final report.
- Compile a final PM Benchmarking report following the review sessions

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# APPENDIX B

April 2011 Summary Notes

NALCOR - PM Benchmarking  
Review Notes April 14 & 15 2011

	<b>REVIEW ITEM and PMM Review notes</b>	<b>Relevant PMBOK Recommendations.</b>
<b>A</b>	<p><b>External Process identifying a Project (NEED)</b> INCEPTION PHASE Reference Policy 02.04 Project Life Cycle -Activities: INCEPTION, Identify need, Appoint PM, Assemble team, Define purpose and objectives</p>	<p>The best reference to this is the early phases of the PMBOK Initiating process group. There are no recommendation on how this should be done. However as the primary input to every project it is a vital part of further project planning and development.</p>
<b>B</b>	<p><b>Project Charter. (Does Charter Identify Stakeholders?)</b> Policy 05.01 references form "Project Design Transmittal" Policy 02.04 identifies as an activity of inception phase to "define purpose and Objectives"  - The Project Design Transmittal does seem to initiate the project well however I will need to review a sample of this document to see if it does indeed represent a project Charter.</p>	<p>Section 4.1 outlines the recommendations for a project charter.</p> <p><b>Key Points to include</b> 1) Statement of work 2) Why project is needed 3) Approval for work to proceed 4) risks and impact issues 5) Stakeholders identified 6) communicated to team.</p>
<b>C</b>	<p><b>Team selection / assignment</b> 06.11 Project Design Development, identifies the procedure as Relevant Supervising Manager appoints the PM, PM then consults the supervisory team to obtain suitable team members.  Observed Functional level reporting with Project assignment. PMI categorizes as weak to balanced Matrix Organization type. (PMBOK 2.4.2 pg 28)</p>	<p>PMBOK Executing Process Group Section 3.5 as well as 4.3. the need is to Staff, Train and Manage the project team and staffing with the proper qualified personnel is recommended. The type of organizational structure will govern the PM's ability to select staff or be assigned staff.</p> <p>No suggestion at this current time as the Nalcor structure can change with the demand of projects.</p>
<b>D</b>	<p><b>Project Specific Execution Plan.</b> Really Need a Sample Study Scope Statement? Policy 06.12</p>	<p>Project Management Plan (PMBOK Chapter 3). A Project specific Project Management Plan (or otherwise referred to as Project Execution Plan or PEP) should be developed for every project. The PMM does not mention this requirement however does provide the PM with flexibility to determine best requirements for the project.</p> <p>SUGGEST These selections should be documented in a PEP</p>
<b>E</b>	<p><b>Scheduling &amp; Time control. Identification of deliverables?</b> Policy 06.14 identifies in .1b The Master Schedule is used as the basis for monitoring both Schedule Performance and Cost Performance.  06.42 identifies the Status reporting including updates of the Schedule. Details and levels of schedule are not apparently defined other than PM is responsible to see is sufficient. Can lead to under developed schedules /plans.</p>	<p>Chapter 4.4 identifies the recommended practice of monitoring and Controlling the Work, Including the measurement of performance and providing forecasting results.</p> <p>Chapter 6 - Project Time Management</p> <p>Chapter 7 - Project Cost Management</p> <p>SUGGEST that a guideline of schedule detail is added to the PMM to ensure a minimum level of trackability is maintained for all projects. This would be a little less chance of having an under developed schedule.</p>
<b>F</b>	<p><b>Project Quality Management</b> Policy 08.01 represents the practices got QA program. Very short write-up? Will need to look closely at the PMBOK on this one</p>	<p>Project Quality Management (PMBOK Chapter 8). The PMM does have Policy 08.01 that outlines Quality Assurance however it does not mention Quality control nor is there a plan developed to manage Quality.</p> <p>SUGGEST A Quality Control section of the PMM be developed to follow the process outlined in PMBOK Chapter 8 including recording and frequency of control checking.</p>
<b>G</b>	<p><b>Procurement &amp; Contract Management</b> Contract Management Policy 06.50, and Purchasing policy 10.30. Tendering Process is clearly defined in 06.54 &amp; 06.55</p>	<p>This section involves some of PMBOK Chapter 5 (Project Execution Management) and all of Chapter 12 (Project Procurement Management)</p> <p>Contracting and Procurement are highly governed on practice by legal requirements, my review of the PMM found that it includes details that meet and surpass the PMBOK recommendations and resulting outputs.</p>
<b>H</b>	<p><b>Budget Control</b> Policy 06.40 outlines the reporting and tracking criteria, 06.42 is Project Status Reporting &amp; 06.43 is for the overall financial cost reporting.</p>	<p>Primarily in reference to PMBOK Chapter 7 - Project Cost Management.</p> <p>With the PMM integrating Cost Control and measurement with the Schedule and a financial in house accounting tool I cannot comment to any suggestions for improvement on these policies at this time.</p>
<b>I</b>	<p><b>Communications Plans &amp; Responsibility identifications</b> Policy's 04.01 PM Responsibilities &amp; 04.02 Team Responsibilities identify the responsibilities of the PM &amp; Project team clearly. 04.04 Summarizes nicely and outlines reporting requirements.</p>	<p>PMBOK Chapter 3.4.14 - Plan Communications PMBOK Chapter 10 - Project Communications Management</p> <p>SUGGEST Although the PMM does address role responsibilities it was not found anywhere where a project specific responsibility plan. As well no Project Specific Communications plan was noted in the PMM review. It is recommended that a Responsibility Assignment Matrix or RACI Chart be required for all projects to appropriate level of project details and included in a Project Execution Plan. (RACI stands for Responsible, Accountable, Consulted, and Informed)</p>

**NALCOR - PM Benchmarking**  
**Review Notes April 14 & 15 2011**

<b>J</b>	<p><b><u>Change Management Plan / Process.</u></b> 06.58 identifies the contract change process. CCO/COA process 06.11 identifies the design change process. JC CO process.</p> <p>ALL Project change that has a cost impact must receive approval in the Job Cost (Now Capital Budget) Change Process.</p>	<p>Each knowledge area of PMBOK has a control of change component. Whereby identification, record, impact measurement, mitigation and approval of change needs to be performed. The PMM identifies the process required to manage and control change appropriately.</p>
<b>K</b>	<p><b><u>Risk Management Plans / Process</u></b> Have not located reference to a Policy or procedure in the PMM. I did find in 06.42 Project Status Report includes risks/Issues and mitigation measures. And in 06.51 Procurement Packaging that RISK needs to be considered.</p>	<p>Project Risk Management. (Pombo Chapter 11). The PMM does not have nor references a specified policy or procedure to follow in respect to Risk Management.</p>
<b>L</b>	<p><b><u>Project completion validation process</u></b> 06.06 Contract completion outlines the requirements. No specific mention of punch lists however there is noted written acceptance.</p>	<p>Assurance of all the required Works have been completed, All PMBOK Knowledge areas. Written acceptance of all contract is appropriate for all contracts / procurements.</p> <p><b><i>SUGGEST that the PEP be developed with a completion validation checklist or other record/tool the PM can use to validate overall scope completion.</i></b></p>
<b>M</b>	<p><b><u>Project Closeout</u></b> 11.01 and 11.02 provide the necessary guideline to close a project and perform a post implementation report, along with a lesson learned collection and summary record. No indication if data is carried in any way to a practice / policy / procedure improvement initiative.</p>	<p>PMBOK Closing Process Group - Section 3.7</p> <p>PMM outlines very well the requirements to close a project entirely. Exception is there is no reference for how the lessons learned can get carried forward for other projects to use in planning process.</p> <p><b><i>SUGGEST that the PMM include a method for the lessons learned information to be communicated or made available for future projects to reference in planning phase.</i></b></p>

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PM BENCHMARKING REPORT  
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# APPENDIX C

July 2011 Project Review Notes

## PM Benchmarking - Projects Review Session #1

Project Name: Bay D'espair - Intake Gate Controls

Project Manager: Greg Read

Magnitude Budget: \$820k

% Complete: 30%

Project Start Date: Feb-11

Project End Date: Dec-12

### Checklist items Project #1

YES NO

		YES	NO
A	02.04 Inception Phase (Record preceding the Project Design Transmittal)	x	
	available and viewed during this review.	x	
Notes: Initial Project inception is captured during the Regulated Capital Proposal Budget process.			
Viewed: Project Proposal Summary & Project Estimate.			
B1	05.01 Project Design Transmittal (Or Charter) Completed, accepted.		x
	available and viewed during this review.	x	
Notes: The Project design Transmittal was generated however had not been signed off (95% comp)			
Viewed: The Project Design Transmittal - Drafted up only.			
B2	02.04 Project Purpose and objectives clearly defined and documented.	x	
	available and viewed during this review.	x	
Notes: This information resided on the Project Design Transmittal			
Viewed: The Project Design Transmittal			
C	Team Selection / Assignment (06.11.1) process documented.		x
	available and viewed during this review.		x
Notes: As part of the reorganization the PM is assigned the use of multiple personnel, the PM is responsible to use these people and assign them to projects in there roles were best utilized. Most of these individuals are in Growth Phase, and are being Mentored. However it was noted That the project is being minorly impacted due to the newer staff.			
D	Project Specific Execution Plan (Study scope Statement 06.12) comp.		x
	available and viewed during this review.		x
Notes: Most info is found in overview format in the Project Design Tranmittal. Missing is the detail of who is on the project and what their individual responsibilities are. Also no Org Chart.			
Viewed: The Project Design Transmittal			

**Checklist items Project #1**

**YES NO**

E1	06.14.1b Master Schedule created.	x	
	available and viewed during this review.	x	
Notes: The overall 2011 schedule was created during the Resource exercise in early 2011. However this schedule is not being maintained nor is it being used in progress measurement, only a collaborative team effort managing to target milestone dates. No formal schedule tracking.			
Viewed: 2011 Resource Schedule			
E2	06.42 Status reporting and Schedule updates done.	x	
	available and viewed during this review.	x	
Notes: Being midfull of milestone dates, the Project Dashboard is updated periodically (3-4weeks) and used for progress meetings and reporting. Good tool but lacks the finer details needed to measure project performance. Cost performance to date is subjective to JDE expenditure and is not correlated to Schedule performance which is also not tracked.			
F	08.01 Quality Assurance measures for project identified.		x
	available and viewed during this review.		x
Notes: Other than Greg using the PMM TOC as his checklist there is not a specific PMQA/QC. Design QA is following the Procedure for sealing, Signing & approving Engineering Drawings and Documents. Also A Project Document checklist is available (see PMM 04.05.1)			
G	Is Procurement & Contract Management following PMM? (06.50, 10.30, 06.54, 06.55)	x	
	available and viewed during this review.	x	
Notes: This is a carefully followed process especially for the Regulated Group. The process is carefully adhered to by the buyers and purchasing group.			
Viewed: Engineering Services group - saw JDE screenshot with approval and PO assigned. List of Materials ordered was shown that identified the PO# from post JDE population.			
H	Is Budget Control following PMM? (06.40, 06.42, 06.43)	x	
	available and viewed during this review.	x	
Notes: All forecasting is done separately and by estimate recast. Only performed when sense of over expenditure is felt by PM. PM noted that with the expenditures noted a recast is needed on this project and will be done imminently. Dashboard shows the budget values.			
I	Is a Project Specific Responsibilities Plan Identified/created?	x	
	available and viewed during this review.	x	
Notes: The overview level Responsibilities are identified on the Project Design Transmittal.			
Viewed: Design Transmittal			
J1	06.11 Design change process followed?	n/a	
	available and viewed during this review.	n/a	
Notes: Not applicable to this project as there has been no design changes noted to date. if it was applicable 06.12 Job Cost Change Process would be the process to follow.			



**Checklist items Project #1**

**YES NO**

J2	06.58 Contract change process followed?	n/a	
	available and viewed during this review.	n/a	
Notes: there have been no Contracts on this project to date. if it was applicable 06.12 Job Cost Shange Process would be the process to follow.			
K	Is a Project Risk Management Plan created and followed?		x
	available and viewed during this review.	x	
Notes: No specific plan is created or followed. However the project Dashboard identifies Major Risks to cost and schedule and includes mitigation measures being done.  NEED RISK REGISTER & PROCEEDURE			
L	06.60 Contract completion process followed & Documented?	n/a	
	available and viewed during this review.	n/a	
Notes: No Contracts			
M	11.01 & 11.02 Project Closeout (Applicable?)	n/a	
	Post Implementation report completed	n/a	
	Lessons Learned Collection & Summary Completed	n/a	
	Are findings used in a best practice or other improvement initiative		x
Notes: Project is yet to this stage and none of the closeout has been started.			

## PM Benchmarking - Projects Review Session #2

Project Name: Hollyrood Terminal Station, replace compressed Air piping & install dew point monitoring

Project Manager: Todd Collins

Magnitude Budget: \$500k

% Complete: ~55% (2nd yr of 2 yr project)

Project Start Date: Feb-10

Project End Date: Nov-11

### Checklist items Project #2

		YES	NO
A	02.04 Inception Phase (Record preceding the Project Design Transmittal)	x	
	available and viewed during this review.	x	
Notes: Project was assigned to PM. Capital Budget Proposal was generated by others.			
Viewed: Project Proposal Summary & Project Estimate.			
B1	05.01 Project Design Transmittal (Or Charter) Completed, accepted.	x	
	available and viewed during this review.	x	
Notes: The Project design Transmittal was generated and has been signed off			
Viewed: The Project Design Transmittal			
B2	02.04 Project Purpose and objectives clearly defined and documented.	x	
	available and viewed during this review.	x	
Notes: This information resided on the Project Design Transmittal			
Viewed: The Project Design Transmittal			
C	Team Selection / Assignment (06.11.1) process documented.		x
	available and viewed during this review.		x
Notes: As part of the reorganization the PM is assigned the use of multiple personnel, the PM is responsible to use these people and assign them to projects in there roles were best utilized. Most of these individuals are in Growth Phase, Working well however Quality needs improvement and is getting better. Not documented			
D	Project Specific Execution Plan (Study scope Statement 06.12) comp.		x
	available and viewed during this review.		x
Notes: Most info is found in overview format in the Project Design Tranmittal. Discipline Engineering Lead does sign off & understand scope and Schedule.			
Viewed: The Project Design Transmittal			

### Checklist items Project #2

		YES	NO
E1	06.14.1b Master Schedule created.	x	
	available and viewed during this review.	x	
Notes: Original Project Resource Schedule was created and a hardcopy is in the project file. Detailed process is not used and no Schedule updates are done.			
Viewed: 2011 Resource Schedule			
E2	06.42 Status reporting and Schedule updates done.	x	
	available and viewed during this review.	x	
Notes: The Project Dashboard is updated periodically (every 2 weeks) Good tool but lacks the finer details needed to measure project performance. Cost performance to date is subjective to JDE expenditure and is not correlated to Schedule performance which is also not tracked.			
F	08.01 Quality Assurance measures for project identified.		x
	available and viewed during this review.		x
Notes: Design QA/QC follows the signing, sealing, and issuing engineering documents and drawings. There is a PM - Project Documentation Checklist. Contractor QA program is requested from them prior to contract.			
G	Is Procurement & Contract Management following PMM? (06.50, 10.30, 06.54, 06.55)	x	
	available and viewed during this review.	x	
Notes: This is a carefully followed process especially for the Regulated Group. The process is carefully adhered to by the buyers and purchasing group.			
Viewed: Viewed 2 Material tenders and one Construction contract tender including the Approval to award. Evaluations and notice to proceed documents were available as per supply chain mgmt.			
H	Is Budget Control following PMM? (06.40, 06.42, 06.43)	x	
	available and viewed during this review.	x	
Notes: JDE review of costs known and reforecast by remaining known work. Recorded on the dashboards.			
Viewed: Project Dashboard Summary.			
I	Is a Project Specific Responsibilities Plan Identified/created?	x	
	available and viewed during this review.	x	
Notes: Project Design Transmittal Contains discipline responsibility and scope and is signed off and accepted.			
Viewed: Design Transmittal			
J1	06.11 Design change process followed?	n/a	
	available and viewed during this review.	n/a	
Notes: No design changes to date			

**Checklist items Project #2**

		YES	NO
J2	06.58 Contract change process followed?	n/a	
	available and viewed during this review.	n/a	
	Notes: No contract changes to date		
K	Is a Project Risk Management Plan created and followed?		x
	available and viewed during this review.		x
	Notes: Cost risks & schedule risks are recorded on the Project Dashboard. Otherwise not a risk process to follow.  NEED RISK REGISTER & PROCEEDURE		
L	06.60 Contract completion process followed & Documented?	n/a	
	available and viewed during this review.	n/a	
	Notes: N/A		
M	11.01 & 11.02 Project Closeout (Applicable?)	n/a	
	Post Implementation report completed	n/a	
	Lessons Learned Collection & Summary Completed	n/a	
	Are findings used in a best practice or other improvement initiative		x
	Notes: Project is yet to this stage and none of the closeout has been started.		

Other Additional comments from reviewee.

- 1) Project Capital budget Proposal estimate process is not necessarily generated to an appropriate level of design detail
- 2) Similar Project Lessons Learned Summary is stored on the job file for future review.
- 3) Resource Issues. Short of people and it is felt that the PM should not be as involved in design.

## PM Benchmarking - Projects Review Session #3

Project Name: Tower Protection - CAH/BAH (Regulated)

Project Manager: Lisa Kingsley

Magnitude Budget: 300k

% Complete: 25%

Project Start Date: Feb-11

Project End Date: Nov-11

### Checklist items Project #2

YES NO

		YES	NO
A	02.04 Inception Phase (Record preceding the Project Design Transmittal)	x	
	available and viewed during this review.	x	
Notes: Capital budget Proposal was created by others and project is similar to work performed last year.			
Viewed: Capital Budget Proposal (Project Proposal Summary & Project Estimate)			
B1	05.01 Project Design Transmittal (Or Charter) Completed, accepted.	x	
	available and viewed during this review.	x	
Notes: The Project design Transmittal was generated and has been signed off			
Viewed: The Project Design Transmittal			
B2	02.04 Project Purpose and objectives clearly defined and documented.	x	
	available and viewed during this review.	x	
Notes: This information resides on the Project Design Transmittal			
Viewed: The Project Design Transmittal			
C	Team Selection / Assignment (06.11.1) process documented.	x	
	available and viewed during this review.	x	
Notes: PM Consulted with Civil Mgr and found a shortage of resources and it was determined to use a consultant.			
Viewed: proposal for scope that had been issued for the Consultant.			
D	Project Specific Execution Plan (Study scope Statement 06.12) comp.	x	
	available and viewed during this review.	x	
Notes: The Project Design Transmittal contains high level overview. Includes Scope and rationale.			
Viewed: The Project Design Transmittal			

**Checklist items Project #2**

**YES NO**

E1	06.14.1b Master Schedule created.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	available and viewed during this review.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Notes: Original Project Resource Schedule was created and a hardcopy is in the project file. Detailed process is not used and no Schedule updates are done.			
Viewed: 2011 Resource Schedule			
E2	06.42 Status reporting and Schedule updates done.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	available and viewed during this review.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Notes: The Project Dashboard is up to date and is the reporting source.			
Viewed: The Project Dashboard			
F	08.01 Quality Assurance measures for project identified.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	available and viewed during this review.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Notes: The QA on this project is a very informal process. Consultant is producing the Civil/ Tower Design. The Design is reviewed in house and the Tower design is reliant on the Consultant expertise. Durring Construction Nalcor and Consultant will have inspection duties.			
G	Is Procurement & Contract Management following PMM? (06.50, 10.30, 06.54, 06.55)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	available and viewed during this review.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Notes: Consultant was aquired through current Master Service Agreement in accordance with supply chain management.			
Viewed: Request for Proposal, Received Quotation, Award Authorization.			
H	Is Budget Control following PMM? (06.40, 06.42, 06.43)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	available and viewed during this review.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Notes: PM reviews the JDE and Compares expenditures vs.Budget. Forecast is subjective. At time of this review the PM was forecasting the Cunsoltant will remain on Budget. Dashboard shows the budget values.			
I	Is a Project Specific Responsibilities Plan Identified/created?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	available and viewed during this review.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Notes: No Specific Responsibilities Plan has been created for this project.			
Viewed: Design Transmittal			
J1	06.11 Design change process followed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	available and viewed during this review.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Notes: The design Change process is known by the PM and there was a change on this project. PM had documentation to show the design change and approval.			
Viewed: Design Change Documents			

**Checklist items Project #2**

		YES	NO
J2	06.58 Contract change process followed?	n/a	
	available and viewed during this review.	n/a	
	Notes: Contract not yet awarded for Construction. (Consultant change is considered Design Change)		
K	Is a Project Risk Management Plan created and followed?		x
	available and viewed during this review.	x	
	Notes: No specific plan is created or followed. However the project Dashboard identifies Major Risks to cost and schedule and includes mitigation measures being done.  NEED RISK REGISTER & PROCEEDURE		
L	06.60 Contract completion process followed & Documented?	n/a	
	available and viewed during this review.	n/a	
	Notes: No Contracts		
M	11.01 & 11.02 Project Closeout (Applicable?)	n/a	
	Post Implementation report completed	n/a	
	Lessons Learned Collection & Summary Completed	n/a	
	Are findings used in a best practice or other improvement initiative		x
	Notes: Project is yet to this stage and none of the closeout has been started. For this project the Asset Manager advised PM to be aware of lessons Learned from previous tower work.		

Other Additional comments from reviewee.

- 1) PMM Training is needed for all new PMs
- 2) Daily Multitasking is impacting effective work production. More technical support would be helpful to allow greater Project Managment Focus.
- 3) Additional Administrative support to use when needed.

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# APPENDIX D

PMI PM Benchmarking Survey Information





Welcome, Keir Fiske

- [Home](#)
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# Project Benchmark Report

65% 8/16/2011

[Export Report \(.jpg\)](#)

Knowledge Area	Survey Date	Survey Results
		<p><b>80%</b>  <b>Processes from 8/16/2011 Survey</b></p> <ul style="list-style-type: none"> <li>• Control Scope Process 100</li> <li>• Collect Requirements Process 80</li> <li>• Verify Scope Process 100</li> <li>• Create Project Work Breakdown Structure Process 60</li> <li>• Define Scope Process 60</li> </ul> <p><a href="#">Close</a></p>
Project Scope Management	8/16/2011	<p><i>More about Knowledge Area</i></p> <p>The processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. See Ch. 5 of The PMBOK® Guide</p>
		<p><b>65%</b>  <b>Processes from 8/16/2011 Survey</b></p> <ul style="list-style-type: none"> <li>• Acquire Project Team Process 80</li> <li>• Manage Project Team Process 60</li> <li>• Develop Project Team Process 60</li> <li>• Develop Human Resource Plan Process 60</li> </ul> <p><a href="#">Close</a></p>
Project Human Resource Management	8/16/2011	<p><i>More about Knowledge Area</i></p> <p>The processes that organize, manage, and lead the project teams comprised of the people with assigned roles and responsibilities for completing the project. See Ch. 9 of The PMBOK® Guide.</p>

**46%**  
**Processes from 8/16/2011**  
**Survey**

Project Risk Management	8/16/2011	<ul style="list-style-type: none"> <li>• Plan Risk Responses Process 80</li> <li>• Plan Risk Management Process 60 <i>More about Knowledge Area</i></li> <li>• Monitor and Control Risks Process 60 The processes of conducting risk management planning, identification, analysis, response planning, and monitoring and control on a project. See Ch. 11 of The PMBOK® Guide</li> <li>• Identify Risks Process 40</li> <li>• Perform Qualitative Risk Analysis Process 20</li> <li>• Perform Quantitative Risk Analysis Process 20</li> </ul>
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[Close](#)  
**80%**  
**Processes from 8/16/2011**  
**Survey**

Project Communications Management	8/16/2011	<ul style="list-style-type: none"> <li>• Manage Stakeholder Expectations Process 80 <i>More about Knowledge Area</i></li> <li>• Plan Communications Process 80 Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide</li> <li>• Report Performance Process 80</li> <li>• Identify Stakeholders Process 80</li> <li>• Distribute Information Process 80</li> </ul>
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[Close](#)  
**85%**  
**Processes from 8/16/2011**  
**Survey**

Project Procurement Management	8/16/2011	<ul style="list-style-type: none"> <li>• Close Procurements Process 80 <i>More about Knowledge Area</i></li> <li>• Conduct Procurements Process 100 The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of</li> <li>• Administer Procurements Process</li> </ul>
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100 The PMBOK® Guide.

- Plan Procurements Process 60

[Close](#)

**46%**

**Processes from 8/16/2011 Survey**

- Estimate Activity Durations Process 80
- Estimate Activity Resources Process 100 *More about Knowledge Area*

Project Time Management

8/16/2011

- Define Activities Process 40
- Sequence Activities Process 20
- Control Schedule Process 20
- Develop Schedule 20

Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.

[Close](#)

**63%**

**Processes from 8/16/2011 Survey**

- Perform Integrated Change Control Process 100
- Develop Project Charter Process 100 *More about Knowledge Area*
- Close Project or Phase Process 100

Project Integration Management

8/16/2011

- Direct and Manage Project Execution Process 40
- Monitor and Control Project Work Process 20
- Develop Project Management Plan Process 20

The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide

[Close](#)

**100%**

**Processes from 8/16/2011  
Survey**

*More about Knowledge Area*

Project Cost  
Management

8/16/2011

- Estimate Costs  
Process 100
- Determine Budget  
Process 100
- Control Costs Process  
100

The processes involved in estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide

[Close](#)

33%

**Processes from 8/16/2011  
Survey**

*More about Knowledge Area*

Project Quality  
Management

8/16/2011

- Plan Quality Process  
40
- Perform Quality  
Control Process 40
- Perform Quality  
Assurance Process 20

The processes and activities that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. See Ch.8 of The PMBOK® Guide

[Close](#)


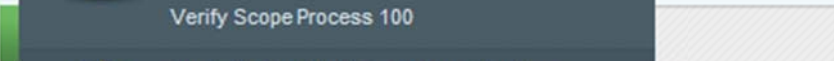





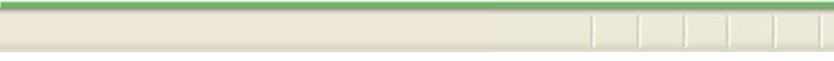
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KNOWLEDGE AREA	SURVEY DATE	SURVEY RESULTS	
<b>Project Scope Management</b>	8/16/2011	 80%	<i>More about Knowledge Area</i> The processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. See Ch. 5 of The PMBOK® Guide
<b>Project Human Resource Management</b>	8/16/2011	 65%	<i>More about Knowledge Area</i> The processes that organize, manage, and lead the project teams comprised of the people with assigned roles and responsibilities for completing the project. See Ch. 9 of The PMBOK® Guide.
<b>Project Risk Management</b>	8/16/2011	 46%	<i>More about Knowledge Area</i> The processes of conducting risk management planning, identification, analysis, response planning, and monitoring and control on a project. See Ch. 11 of The PMBOK® Guide
<b>Project Communications Management</b>	8/16/2011	 80%	<i>More about Knowledge Area</i> Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide
<b>Project Procurement Management</b>	8/16/2011	 85%	<i>More about Knowledge Area</i> The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.
<b>Project Time Management</b>	8/16/2011	 46%	<i>More about Knowledge Area</i> Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.
<b>Project Integration Management</b>	8/16/2011	 63%	<i>More about Knowledge Area</i> The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide
<b>Project Cost Management</b>	8/16/2011	 100%	<i>More about Knowledge Area</i> The processes involved in estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide
<b>Project Quality Management</b>	8/16/2011	 33%	<i>More about Knowledge Area</i> The processes and activities that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. See Ch.8 of The PMBOK® Guide

Project Scope Management	8/16/2011	 <p>80%</p>	<p>The processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. See Ch. 5 of The PMBOK® Guide</p>
Project Human Resource Management	8/16/2011	<div data-bbox="703 170 1339 527"> <p>Processes from 8/16/2011 Survey</p> <ul style="list-style-type: none"> <li>Control Scope Process 100</li> <li>Collect Requirements Process 80</li> <li>Verify Scope Process 100</li> <li>Create Project Work Breakdown Structure Process 60</li> <li>Define Scope Process 60</li> </ul> </div>  <p>46%</p>	<p><a href="#">More about Knowledge Area</a></p> <p>The processes that organize, manage, and lead the project teams comprised of the people with assigned roles and responsibilities for completing the project. See Ch. 9 of The PMBOK® Guide.</p>
Project Risk Management	8/16/2011	 <p>80%</p>	<p><a href="#">More about Knowledge Area</a></p> <p>The processes of conducting risk management planning, identification, analysis, response planning, and monitoring and control on a project. See Ch. 11 of The PMBOK® Guide</p>
Project Communications Management	8/16/2011	 <p>85%</p>	<p><a href="#">More about Knowledge Area</a></p> <p>Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide</p>
Project Procurement Management	8/16/2011	 <p>46%</p>	<p><a href="#">More about Knowledge Area</a></p> <p>The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.</p>
Project Time Management	8/16/2011	 <p>63%</p>	<p><a href="#">More about Knowledge Area</a></p> <p>Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.</p>
Project Integration Management	8/16/2011		<p><a href="#">More about Knowledge Area</a></p> <p>The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide</p>
Project Cost			<p><a href="#">More about Knowledge Area</a></p> <p>The processes involved in</p>



Project Scope Management	8/16/2011		<p>The processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. See Ch. 5 of The PMBOK® Guide</p>
Project Human Resource Management	8/16/2011		<p><i>More about Knowledge Area</i> The processes that organize, manage, and lead the project teams comprised of the people with assigned roles and responsibilities for completing the project. See Ch. 9 of The PMBOK® Guide.</p>
Project Risk Management	8/16/2011		<p><i>More about Knowledge Area</i> The processes of conducting risk management planning, identification, analysis, response planning, and monitoring and control on a project. See Ch. 11 of The PMBOK® Guide</p>
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Project Integration Management	8/16/2011		<p><i>More about Knowledge Area</i> The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide</p>
Project Cost Management	8/16/2011		<p><i>More about Knowledge Area</i> The processes involved in</p>

Processes from 8/16/2011 Survey

- Acquire Project Team Process 80
- Manage Project Team Process 60
- Develop Project Team Process 60
- Develop Human Resource Plan Process 60

<b>Project Scope Management</b>	8/16/2011		<p>The processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. See Ch. 5 of The PMBOK® Guide</p>
<b>Project Human Resource Management</b>	8/16/2011		<p><i>More about Knowledge Area</i> The processes that organize, manage, and lead the project teams comprised of the people with assigned roles and responsibilities for completing the project. See Ch. 9 of The PMBOK® Guide.</p>
<b>Project Risk Management</b>	8/16/2011		<p><i>More about Knowledge Area</i> The processes of conducting risk management planning, identification, analysis, response planning, and monitoring and control on a project. See Ch. 11 of The PMBOK® Guide</p>
<b>Project Communications Management</b>	8/16/2011		<p><i>More about Knowledge Area</i> Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide</p>
<b>Project Procurement Management</b>	8/16/2011		<p><i>More about Knowledge Area</i> The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.</p>
<b>Project Time Management</b>	8/16/2011		<p><i>More about Knowledge Area</i> Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.</p>
<b>Project Integration Management</b>	8/16/2011		<p><i>More about Knowledge Area</i> The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide</p>
<b>Project Cost Management</b>	8/16/2011		<p><i>More about Knowledge Area</i> The processes involved in</p>

**Processes from 8/16/2011 Survey**

- Plan Risk Responses Process 80
- Plan Risk Management Process 60
- Monitor and Control Risks Process 60
- Identify Risks Process 40
- Perform Qualitative Risk Analysis Process 20
- Perform Quantitative Risk Analysis Process 20



Management			planning, and monitoring and control on a project. See Ch. 11 of The PMBOK® Guide
Project Communications Management	8/16/2011	 80%	<i>More about Knowledge Area</i> Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide
Project Procurement Management	8/16/2011	 80%	<i>More about Knowledge Area</i> The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.
Project Time Management	8/16/2011	 46%	<i>More about Knowledge Area</i> Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.
Project Integration Management	8/16/2011	 63%	<i>More about Knowledge Area</i> The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide
Project Cost Management	8/16/2011	 100%	<i>More about Knowledge Area</i> The processes involved in estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide
Project Quality Management	8/16/2011	 33%	<i>More about Knowledge Area</i> The processes and activities that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. See Ch.8 of The PMBOK® Guide

**Processes from 8/16/2011 Survey**






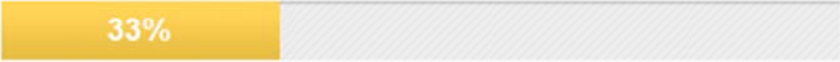
- Manage Stakeholder Expectations Process 80
- Plan Communications Process 80
- Report Performance Process 80
- Identify Stakeholders Process 80
- Distribute Information Process 80

Management			planning, and monitoring and control on a project. See Ch. 11 of The PMBOK® Guide
Project Communications Management	8/16/2011		<p><i>More about Knowledge Area</i></p> <p>Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide</p>
Project Procurement Management	8/16/2011		<p><i>More about Knowledge Area</i></p> <p>The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.</p>
Project Time Management	8/16/2011		<p><i>More about Knowledge Area</i></p> <p>Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.</p>
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Project Cost Management	8/16/2011		<p><i>More about Knowledge Area</i></p> <p>The processes involved in estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide</p>
Project Quality Management	8/16/2011		<p><i>More about Knowledge Area</i></p> <p>The processes and activities that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. See Ch. 8 of The PMBOK® Guide</p>




Processes from 8/16/2011 Survey

- Close Procurements Process 80
- Conduct Procurements Process 100
- Administer Procurements Process 100
- Plan Procurements Process 60



<b>Project Communications Management</b>	8/16/2011		<p><i>More about Knowledge Area</i></p> <p>Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide</p>
<b>Project Procurement Management</b>	8/16/2011		<p><i>More about Knowledge Area</i></p> <p>The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.</p>
<b>Project Time Management</b>	8/16/2011		<p><i>More about Knowledge Area</i></p> <p>Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.</p>
<b>Project Integration Management</b>	8/16/2011		<p><i>More about Knowledge Area</i></p> <p>The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide</p>
<b>Project Cost Management</b>	8/16/2011		<p><i>More about Knowledge Area</i></p> <p>The processes involved in estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide</p>
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**Processes from 8/16/2011 Survey**

- 
Estimate Activity Durations Process 80  
Estimate Activity Resources Process 100
- 
Define Activities Process 40
- 
Sequence Activities Process 20  
Control Schedule Process 20  
Develop Schedule 20








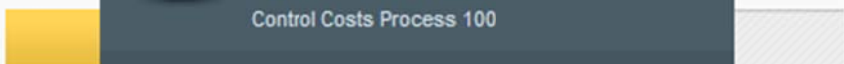


<p><b>Project Communications Management</b></p>	<p>8/16/2011</p>	<p>80%</p>	<p><i>More about Knowledge Area</i> Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide</p>
<p><b>Project Procurement Management</b></p>	<p>8/16/2011</p>	<p>85%</p>	<p><i>More about Knowledge Area</i> The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.</p>
<p><b>Project Time Management</b></p>	<p>8/16/2011</p>	<p>46%</p>	<p><i>More about Knowledge Area</i> Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.</p>
<p><b>Project Integration Management</b></p>	<p>8/16/2011</p>	<p>63%</p>	<p><i>More about Knowledge Area</i> The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide</p>
<p><b>Project Cost Management</b></p>	<p>8/16/2011</p>	<p>100%</p>	<p><i>More about Knowledge Area</i> The processes involved in estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide</p>
<p><b>Project Quality Management</b></p>	<p>8/16/2011</p>	<p>100%</p>	<p><i>More about Knowledge Area</i> The processes and activities that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. See Ch.8 of The PMBOK® Guide</p>

**Processes from 8/16/2011 Survey**

- Perform Integrated Change Control Process 100
- Develop Project Charter Process 100
- Close Project or Phase Process 100
- Direct and Manage Project Execution Process 40
- Monitor and Control Project Work Process 20
- Develop Project Management Plan Process 20









<p><b>Project Communications Management</b></p>	<p>8/16/2011</p>	 <p>80%</p>	<p><i>More about Knowledge Area</i> Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide</p>
<p><b>Project Procurement Management</b></p>	<p>8/16/2011</p>	 <p>85%</p>	<p><i>More about Knowledge Area</i> The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.</p>
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<p><b>Project Integration Management</b></p>	<p>8/16/2011</p>	 <p>63%</p>	<p><i>More about Knowledge Area</i> The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide</p>
<p><b>Project Cost Management</b></p>	<p>8/16/2011</p>	 <p>100%</p>	<p><i>More about Knowledge Area</i> The processes involved in estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide</p>
<p><b>Project Quality Management</b></p>	<p>8/16/2011</p>	 <p>0%</p>	<p><i>More about Knowledge Area</i> The processes and activities that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. See Ch.8 of The PMBOK® Guide</p>

Processes from 8/16/2011 Survey

- Estimate Costs Process 100
- Determine Budget Process 100
- Control Costs Process 100



<p><b>Project Communications Management</b></p>	<p>8/16/2011</p>	 <p>80%</p>	<p><i>More about Knowledge Area</i> Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide</p>
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<p><b>Project Cost Management</b></p>	<p>8/16/2011</p>	 <p>100%</p>	<p><i>More about Knowledge Area</i> The processes involved in estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide</p>
<p><b>Project Quality Management</b></p>	<p>8/16/2011</p>	 <p>33%</p>	<p><i>More about Knowledge Area</i> The processes and activities that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. See Ch.8 of The PMBOK® Guide</p>

**Processes from 8/16/2011 Survey**

- Plan Quality Process 40
- Perform Quality Control Process 40
- Perform Quality Assurance Process 20



## **PMI PM BENCHMARKING SURVEY**

*KAF FOR NALCOR P.E.T.S. AUGUST 16, 2011*

### **Score Legend**

- 5) Always (*more than 80% of the time*)
- 4) Often (*61% to 80% of the time*)
- 3) Sometimes (*41% to 60% of the time*)
- 2) Occasionally (*21% to 40% of the time*)
- 1) Rarely (*Less than 21% of the time*)

- 1) Your project team leaders use a standard method for managing their teams that is consistent from team to team?**

*3/5 – Selected on basis that the PMM is not consistently followed and observation in project reviews that the PMs each managed and were managed in different ways.*

- 2) Your teams use a standard method to audit project results against the quality plans that you've put in place?**

*1/5 – no observation of any project Auditing being performed.*

- 3) Your teams use a standard method to proactively identify risks that may come up during their projects?**

*2/5 – Major risks are standardly identified on the Dashboard however no formal riskmgmt policy is available. And there is not any formal risk register or similar tracked on projects.*

- 4) Your project teams use a standard method for monitoring and recording quality activities?**

*2/5 – Design QA is monitored as per the procedure for signing, sealing and approving Engineering Drawings and documents. However for PM QA there is no process in place or followed, this being a PM benchmarking Survey score selected accordingly. 1 PM used the PMM TOC to use as a checklist.*

- 5) Your teams consistently estimate the resources that are required to deliver on their commitments?**

*5/5 – Although not perfected there is a consistent approach in place to estimate the individual projects and an overall compiled record of Program resource requirements.*

- 6) Your teams consistently document the things that their teams will deliver and what they will not deliver?**

*3/5 – Project Design Transmittals are done on every project and these contain the high level scope of work. There is not a more detailed Scope and there is not a documentation of what is not going to be delivered.*

- 7) Your teams use a consistent method for putting all of the work activities for a project into a logical sequence?**

*1/5 – During observations it was left to each PM to develop the project Planning, scheduling was not developed beyond the 2011 Resource Loading. Consistency is the question and that was not observed.*

**8) Your organization uses a standard method for your team leaders to acquire project teams?**

*4/5 – it was observed that the method is standard that the PM has a pool of personnel that their team is appointed or selected from.*

**9) Your teams use a consistent way to estimate costs for the work necessary to complete a project?**

*5/5 – The initial estimates are consistently developed thru the development of Capital Budget Proposals. And a Estimating group is now in place preparing all the Capital Budget Proposals.*

**10) Your project teams use a standard method for obtaining formal acceptance of their deliverables from the customer or sponsor?**

*5/5 – Formal Project Completion and Sign off is followed. Not observed directly however statements confirming of this and review of the PMM show confirmation.*

**11) Your teams consistently document roles and responsibilities, organization charts and staffing plans?**

*3/5 – Project Org Charts or staff plans did not exist in the observed reviews. Organizational overall staffing requirements are being developed and overall Organization charts/plans have been developed.*

**12) Your teams use a standard method for reviewing and approving changes to what the team is doing?**

*5/5 – Detailed Change processes are in place and observed to be followed where applicable.*

**13) Your teams use a consistent way to regularly check actual performance against what they had planned?**

*1/5 – no observation of where any Planned to date is being tracked. Expenditures are known and viewed against current budgets. Earned Value Monitoring was not observed to be developed.*

**14) Your teams consistently perform the activities that are planned to execute a project?**

*2/5 – With no detailed plans created this can only be observed that each PM sets the look ahead work at the Progress meetings.*

**15) Your teams use a standard method for managing procurement relationships and making contract changes with suppliers as needed?**

*5/5 – The Supply Chain Management process is carefully followed by all teams. Highly governed process for award and change approvals.*

**16) Your teams use a consistent method for writing down all of the work activities necessary to deliver on their commitments?**

*2/5 – No direct observation that this was being done, however score is based on assumption that some documented action logs are created during team meetings.*



**17)Your project teams use a standard method for procuring needed projects and services?**

*5/5 – The Supply Chain Management process is carefully followed by all teams. Highly governed process for award and change approvals.*

**18)Your teams consistently review things that might go wrong on their project and make changes to them based on current conditions?**

*3/5 – Major identified Risks are noted on Project Dashboards and mitigation measures are documented for these. Regular team meetings are forums for discussing and developing solutions to known issues.*

**19)Your teams consistently think about and document how they will integrate quality into their projects?**

*2/5 – PM Quality Management plans are not developed or documented during the design phase of projects. QA/QC requirements during Construction are well developed and documented.*

**20)Your teams use a consistent method to close the current project and release resources before moving on to their next project?**

*5/5 – Project Close out procedures are in the PMM and followed by the PMs reviewed discussing past projects.*

**21)Your teams proactively plan how they will respond during a crisis that comes up during their project?**

*4/5 – I did not have any observation or incite to this and therefore selected a supportive score.*

**22)Your teams use a standard method to document how they will manage risk during their projects?**

*3/5- Similar to Q.18 Major identified Risks are noted on Project Dashboards and mitigation measures are documented for these. Regular team meetings are forums for discussing and developing solutions to known issues.*

**23)Your teams proactively plan how they will procure goods and services necessary to deliver on their commitments?**

*3/5 – Plan preparation in general is in need of improvements. No observation of a documented Procurement or Consultant plan.*

**24)Your teams use a consistent way to communicate information about what's going on with their project?**

*4/5 – Regular team meetings are scheduled and carried out during the execution of every project.*

**25)Your project teams use a standard method for collecting information from customers of the project to determine what they need?**

*4/5 – I did not have any observation or incite to this and therefore selected a supportive score.*

**26)Your leadership consistently documents their initial expectations for a project and assign a project manager?**

*5/5 – Each project has a Capital Budget Proposal created and following which a PM is assigned and Project design transmittal is generated.*

**27)Your teams use a standard method to qualitatively analyze risks that may come up during their projects?**

*1/5- Major identified Risks are noted on Project Dashboards and mitigation measures are documented for these. No evidence of Risk Analysis is done in any formal process.*

**28)Your organization consistently identifies people that will be affected by your projects?**

*4/5 – Stakeholders are identified during the Capital Budget Proposal and are further identified in the Project Design Transmittal.*

**29)Your teams use a consistent way to develop their team members so they are able to contribute most effectively?**

*3/5 – Mentoring is in place informally and observation was that some personnel may not be receiving the full supportive direction they need. Noteworthy that this could be directly related to the increase in both workload and increasing new workers.*

**30)Your teams use a consistent method for estimating the length of time it will take to complete each of their work activities?**

*4/5 – Initial Capital Budget proposals are generated consistently and using a assigned estimating group. Individual teams provide forecasts in varying manors during the execution of the projects.*

**31)The people in charge of running your projects use a consistent way to document a plan showing how they will define, prepare, integrate and coordinate their initiatives?**

*1/5 – Other than the Project design Transmittal there is not any formal process or plan in place that addresses this. A Project Specific Execution Plan is needed for every project in order to address these and other items.*

**32)Your team leaders use a consistent method for collecting and distributing performance information about their initiatives?**

*4/5 – The Project Dashboards are regularly updated and shared amongst the overall group and used in Status reporting to the teams. Observed to be very good summary tool.*

**33)Your teams use a standard method for determining budgets?**

*5/5 – All budgets are generated during the Capital Budget Proposal stage.*

**34)Your project leaders use a standard method to analyze the actual costs against the budget and manage changes in order to meet commitments?**

*5/5 – The JDE system is used to monitor the actual expenditures vs. Budget. The Design Change process and Contract Change processes are followed in order to manage changes to the Budgets.*

**35)Your teams use a standard method for reviewing and approving changes to the project?**

*5/5 - . The Design Change process and Contract Change process are followed in order to manage changes to the Budgets, Schedule, and Scope.*

**36)All of your teams develop standard schedules consistently?**

*1/5 – Of the projects reviewed none had developed a project schedule to follow and monitor the work. The 2011 Resource Plan Schedules Created in Late 2010 early 2011 are all that was in the project files for each.*

**37)Your project leaders use a standard method to analyze the schedule and manage changes in order to meet commitments?**

*1/5 – Without the generation of a Project Schedule that is monitored and progressed there is not a standardized method followed to monitor schedule plans.*

**38)Your teams use a consistent method to determine how they will communicate with people impacted by their projects?**

*4/5 – I did not have any observation or incite to this and therefore selected a supportive score.*

**39)The people in charge of running your initiatives use a consistent way to describe everything their initiative will deliver that is broken down into manageable pieces?**

*3/5 – Although there is a Capital Budget Proposal and Project Design Transmittal created for each project it was not observed any breakdown of the Scope of work in these documents.*

**40)Your teams use a standard method to manage expectations of people affected by your projects?**

*4/5 – I did not have any observation or incite to this and therefore selected a supportive score.*

**41)Your teams complete contracts with suppliers before moving on to their next project?**

*4/5 – no direct observation of this in any formal document or procedure however knowledge from the Resource Planning exercises it is apparent that the conclusion of the previous years projects are important steps to complete before the next years projects begin.*

**42)Your teams use a standard method to quantitatively analyze risks that may come up during their projects?**

*1/5- Major identified Risks are noted on Project Dashboards and mitigation measures are documented for these. No evidence of Risk Analysis is done in any formal process.*



Welcome, Keir Fiske

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## Your survey is ready to submit



Submit your responses and see your results.

### Would you like to review your responses?

Select "Revise" to open your question and select a different response.

- 1.

Your project team leaders use a standard method for managing their teams that is consistent from team to team?

[Revise](#) Response: **Sometimes**

- 2.

Your teams use a standard method to audit project results against the quality plans that you've put in place?

[Revise](#) Response: **Rarely**

- 3.

Your teams use a standard method to proactively identify risks that may come up during their projects?

[Revise](#) Response: **Occasionally**

- 4.

Your project teams use a standard method for monitoring and recording quality activities?

[Revise](#) Response: **Occasionally**

- 5.

Your teams consistently estimate the resources that are required to deliver on their commitments?

Revise Response: **Always**

- 6.

Your teams consistently document the things that their teams will deliver and what they will not deliver?

Revise Response: **Sometimes**

- 7.

Your teams use a consistent method for putting all of the work activities for a project into a logical sequence?

Revise Response: **Rarely**

- 8.

Your organization uses a standard method for your team leaders to acquire project teams?

Revise Response: **Often**

- 9.

Your teams use a consistent way to estimate costs for the work necessary to complete a project?

Revise Response: **Always**

- 10.

Your project teams use a standard method for obtaining formal acceptance of their deliverables from the customer or sponsor?

Revise Response: **Always**

- 11.

Your teams consistently document roles and responsibilities, organization charts and staffing plans?

Revise Response: **Sometimes**

- 12.

Your teams use a standard method for reviewing and approving changes to what the team is doing?

Revise Response: **Always**

- 13.

Your teams use a consistent way to regularly check actual performance against what they had planned?

Revise Response: **Rarely**

- 14.

Your teams consistently perform the activities that are planned to execute a project?

Revise Response: **Occasionally**

- 15.

Your teams use a standard method for managing procurement relationships and making contract changes with suppliers as needed?

Revise Response: **Always**

- 16.

Your teams use a consistent method for writing down all of the work activities necessary to deliver on their commitments?

Revise Response: **Occasionally**

- 17.

Your project teams use a standard method for procuring needed projects and services?

Revise Response: **Always**

- 18.

Your teams consistently review things that might go wrong on their project and make changes to them based on current conditions?

Revise Response: **Sometimes**

- 19.

Your teams consistently think about and document how they will integrate quality into their projects?

Revise Response: **Occasionally**

- 20.

Your teams use a consistent method to close the current project and release resources before moving on to their next project?

Revise Response: **Always**

- 21.

Your teams proactively plan how they will respond during a crisis that comes up during their project?

Revise Response: **Often**

- 22.

Your teams use a standard method to document how they will manage risk during their projects?

Revise Response: **Sometimes**

- 23.

Your teams proactively plan how they will procure goods and services necessary to deliver on their commitments?

[Revise](#) *Response: Sometimes*

- 24.

Your teams use a consistent way to communicate information about what's going on with their project?

[Revise](#) *Response: Often*

- 25.

Your project teams use a standard method for collecting information from customers of the project to determine what they need?

[Revise](#) *Response: Often*

- 26.

Your leadership consistently documents their initial expectations for a project and assign a project manager?

[Revise](#) *Response: Always*

- 27.

Your teams use a standard method to qualitatively analyze risks that may come up during their projects?

[Revise](#) *Response: Rarely*

- 28.

Your organization consistently identifies people that will be affected by your projects?

[Revise](#) *Response: Often*

- 29.

Your teams use a consistent way to develop their team members so they are able to contribute most effectively?

[Revise](#) *Response: Sometimes*

- 30.

Your teams use a consistent method for estimating the length of time it will take to complete each of their work activities?

[Revise](#) *Response: Often*

- 31.

The people in charge of running your projects use a consistent way to document a plan showing how they will define, prepare, integrate and coordinate their initiatives?

[Revise](#) Response: **Rarely**

- 32.

Your team leaders use a consistent method for collecting and distributing performance information about their initiatives?

[Revise](#) Response: **Often**

- 33.

Your teams use a standard method for determining budgets?

[Revise](#) Response: **Always**

- 34.

Your project leaders use a standard method to analyze the actual costs against the budget and manage changes in order to meet commitments?

[Revise](#) Response: **Always**

- 35.

Your teams use a standard method for reviewing and approving changes to the project?

[Revise](#) Response: **Always**

- 36.

All of your teams develop standard schedules consistently?

[Revise](#) Response: **Rarely**

- 37.

Your project leaders use a standard method to analyze the schedule and manage changes in order to meet commitments?

[Revise](#) Response: **Rarely**

- 38.

Your teams use a consistent method to determine how they will communicate with people impacted by their projects?

[Revise](#) Response: **Often**

- 39.

The people in charge of running your initiatives use a consistent way to describe everything their initiative will deliver that is broken down into manageable pieces?

[Revise](#) Response: **Sometimes**

- 40.

Your teams use a standard method to manage expectations of people affected by your projects?



[Revise](#) Response: **Often**

- 41.

Your teams complete contracts with suppliers before moving on to their next project?

[Revise](#) Response: **Often**

- 42.

Your teams use a standard method to quantitatively analyze risks that may come up during their projects?

[Revise](#) Response: **Rarely**

SUBMIT SURVEY

Submit your responses and see your results

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**Stantec**

17895-000 – 2011 P.E.T.S.  
PM BENCHMARKING REPORT  
NALCOR ENERGY, ST. JOHN'S, NL



**Stantec**

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PM Benchmarking Report



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December 5, 2013

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Executive Summary  
December 5, 2013

## Executive Summary

### Overview

This report is to provide the written summary in regards to the 2013 Project Management Benchmarking review performed on the Project Management systems in use by the Nalcor P.E.T.S. Group. This review was conducted to measure progress and improvements made on the initial PM Benchmarking Study that was conducted in 2011. In approximately March 2011 Stantec was asked to provide an overview review of the current Project Management Manual (PMM) and associated systems in order to provide a Benchmark for comparative and improvement purposes. This initial Study concluded with a findings report submitted in August of 2011. The focus of the review this current report covers was against the recommendations that were included in the August 2011 report (Section 4.0, pg 4.1).

To support the review and provide consistency the notes received during the current exercise were to obtain knowledge necessary to complete an online Survey hosted by PMI.org on PM Benchmarking.

### Summary

Overall the Nalcor P.E.T.S. group is performing on average or above with regards to Project Management Methodology and Project Execution. Accordingly the results of the PMI.org online PM Benchmarking Survey resulted in the P.E.T.S. Group obtaining an 85% in compliance to the PM Knowledge Areas scoring as follows:

1.	Project Integration Management	93%
2.	Project Cost Management	93%
3.	Project Time Management	86%
4.	Project Procurement Management	85%
5.	Project Scope Management	96%
6.	Project Risk Management	80%
7.	Project Human Resources Management	70%
8.	Project Communications Management	80%
9.	Project Quality Management	73%

The above results show a significant improvement (up 19% overall) when compared to the 2011 Projects Reviews. Of the top three (3) areas found in 2011 for greatest need for process improvement these areas score results were Quality: +40%, Risk:+34% and Time/Plan Management: +40%.





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Project Description  
December 5, 2013

## 1.0 Project Description

---

### 1.1 PROJECT OVERVIEW

A specific group within Nalcor has been created to oversee and execute capital projects both for the Regulated and Non-Regulated business sectors. This group is known as the "Project and Execution Technical Services Team" or P.E.T.S. for short. The creation of such a team also involves the review of processes and procedures that are in place and being followed. A review needed to assess the effectiveness and if appropriate for the works being performed. As part of these overall procedures the area of important focus of the P.E.T.S. group are those that focus on Project Management.

In approximately March 2011 Stantec was asked to provide an overview review of the current Project Management Manual (PMM) and associated systems in order to provide a Benchmark for comparative and improvement purposes. This initial Study concluded with a findings report submitted in August of 2011.

In October of 2013 Stantec was asked to provide a review of the current activities within the Nalcor P.E.T.S. Group and to observe and report on the improvements made on the 2011 report Recommendations. (These recommendations can be found in the August 2011 report, section 4.0, pg 4.1). In order to accomplish this review interview sessions were held on November 19 & 20, 2013 with three (3) Project managers to review active projects. Additionally a meeting was held with the two (2) Lead Schedulers to review the processes in place as it relates to Master Schedule generation and project plan reviews.

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**2013 P.E.T.S.**  
**PM BENCHMARKING REPORT**

Reviews and PMI Survey Information  
December 5, 2013

## **2.0 Reviews and PMI Survey Information**

---

### **2.1 PM REVIEW SESSIONS**

During November 19 & 20, 2013 project reviews were conducted on three (3) selected P.E.T.S. Projects that were currently underway. The Projects review consisted of discussion with the Project Manager of each of 3 projects and topics were discussed that had focus on findings of the August 2011 PM Benchmarking Report recommendations and with an underlying focus to obtain necessary knowledge to complete the online Survey hosted by PMI.org on PM Benchmarking.

The three (3) Projects reviewed were selected based on the underlying criteria of that each was to be currently in progress and either of, multidiscipline with a seasoned Project manager, or newer Project Manager with a primarily single discipline team, or an intermediate long term project. These criteria were set to select projects that are applicable to the current processes and to gain insight of a broad range of knowledgebase of the Project Mangers in procedures compliance and also to find process improvement commonalities that are not project size or work experience biased.

Copies of the project review observations are included in Appendix "C".

### **2.2 PMI PM BENCHMARKING SURVEY**

In the same fashion as done in 2011, In support of the Procedures review and the Projects review the Project Management Institute (PMI) has an online PM Benchmarking Survey available for PMI members to use to assess their company's relevant performance against the standard methodology as outlined in the Project Management Body of Knowledge. The reviewer as a PMI member has completed this survey on behalf of the Nalcor P.E.T.S. Group using the available information observed from time spent within the group and through these most recent review sessions. The report can be found in Appendix "A" along with a copy of the questions and descriptions on how they were responded. The additional information only available by online review has been captured here for reference only to better assist with understanding the report.

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Reviews and PMI Survey Information  
December 5, 2013

What can be observed from the completion of this survey is best done by comparison to the similar survey that was done in 2011, in particularly the 3 main focus areas of recommended improvement:

	2011	2013	UP +%
1. Project Risk Management	46%	80%	34%
2. Project Time Management	46%	86%	40%
3. Project Quality Management	33%	73%	40%

Online PMI Benchmarking Survey Comparison results data

KNOWLEDGE AREA	SURVEY DATE	SURVEY RESULTS	
Project Scope Management	8/16/2011	80%	<i>More about Knowledge Area</i> The processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. See Ch. 5 of The PMBOK® Guide
	11/25/2013	96%	
Project Human Resource Management	8/16/2011	65%	<i>More about Knowledge Area</i> The processes that organize, manage, and lead the project teams comprised of the people with assigned roles and responsibilities for completing the project. See Ch. 9 of The PMBOK® Guide.
	11/25/2013	70%	
Project Risk Management	8/16/2011	46%	<i>More about Knowledge Area</i> The processes of conducting risk management planning, identification, analysis, response, planning, and monitoring and control on a project. See Ch. 11 of The PMBOK® Guide
	11/25/2013	80%	
Project Communications Management	8/16/2011	80%	<i>More about Knowledge Area</i> Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide
	11/25/2013	80%	
Project Procurement Management	8/16/2011	85%	<i>More about Knowledge Area</i> The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.
	11/25/2013	85%	
Project Time Management	8/16/2011	46%	<i>More about Knowledge Area</i> Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.
	11/25/2013	86%	
Project Integration Management	8/16/2011	63%	<i>More about Knowledge Area</i> The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide
	11/25/2013	93%	
Project Cost Management	8/16/2011	100%	<i>More about Knowledge Area</i> The processes involved in estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide
	11/25/2013	93%	
Project Quality Management	8/16/2011	33%	<i>More about Knowledge Area</i> The processes and activities that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. See Ch. 8 of The PMBOK® Guide
	11/25/2013	73%	

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2013 P.E.T.S.  
PM BENCHMARKING REPORT

Reviews  
December 5, 2013

## 3.0 Reviews

---

### 3.1 PROJECT REVIEWS

Review meetings were conducted as follows:

Date: August 19 & 20, 2013

Location: Nalcor's Office, St. John's, NL.

Attendees: Alberta Marche, Craig T Power, Paul Dilion, Steven Drew, Tracy Doran, John Maclsaac, Keir Fiske (STN)

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2013 P.E.T.S.  
PM BENCHMARKING REPORT

Recommendations  
December 5, 2013

## 4.0 Recommendations

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The extent of this effort was to provide the P.E.T.S. Group where they have improved to as it relates to the previous recommendations. The details of these focus areas were as follows;

- Develop a policy and procedure that requires that a Project Specific Execution Plan (PEP) be developed for each and every project to a detail appropriate to the project. This plan would incorporate the existing Project Design Transmittals however would encompass the remaining methodology that the Project manager elects to do to manage the project as applicable such as. A sample detailed PEP Table of contents is included in Appendix "E" for reference.
- Develop a policy and procedure for the requirements to manage risks on projects. This would include an initial project risk review and an ongoing record of risks and mitigation plans recorded on a risk register. For further specific detail referring to PMBoK Chapter 11 would assist.
- Develop a policy and procedure for the requirements of overall Project Quality Management. This includes not only design quality but overall assurance the project procedures are being followed. This would be an expansion to the existing PMM Policy 08.01 and should be included in every PEP. For further specific detail referring to PMBoK Chapter 8 would assist.
- Schedule and project timeline planning should be improved on development. Regular progress monitoring is paramount to the project manager having the most current and up to date status of project tasks and impact of changes to sequence of activities. It is suggested that a guideline be added to the PMM that outlines the minimum level of schedule detail is developed for every project.

Overall each of these areas did see a noticeable improvement and that is reflective of the results of the findings in this report. As a result of this report there is only 1 key area of recommended focus.

- The processes the P.E.T.S. is following are very well developed and working well. It was found that there was not a formal Policy developed as part of the PMM or otherwise. It is recommended the current processes that have been developed be included in the PMM and thus documenting what is to be done on all projects.

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Appendices  
December 5, 2013

## 5.0 Appendices

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Appendix A PMI Benchmarking Report 2013










Appendix B PMI Benchmarking Comparison 2011 versus 2013

Appendix C Interview Review Notes

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2013 P.E.T.S.  
PM BENCHMARKING REPORT

# APPENDIX A

## PMI Benchmarking Report 2013

KNOWLEDGE AREA	SURVEY DATE	SURVEY RESULTS	
<b>Project Integration Management</b>	11/25/2013	 93%	<i>More about Knowledge Area</i> The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide
<b>Project Cost Management</b>	11/25/2013	 93%	<i>More about Knowledge Area</i> The processes involved in estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide
<b>Project Time Management</b>	11/25/2013	 86%	<i>More about Knowledge Area</i> Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.
<b>Project Procurement Management</b>	11/25/2013	 85%	<i>More about Knowledge Area</i> The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.
<b>Project Scope Management</b>	11/25/2013	 96%	<i>More about Knowledge Area</i> The processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. See Ch. 5 of The PMBOK® Guide
<b>Project Risk Management</b>	11/25/2013	 80%	<i>More about Knowledge Area</i> The processes of conducting risk management planning, identification, analysis, response planning, and monitoring and control on a project. See Ch. 11 of The PMBOK® Guide
<b>Project Human Resource Management</b>	11/25/2013	 70%	<i>More about Knowledge Area</i> The processes that organize, manage, and lead the project teams comprised of the people with assigned roles and responsibilities for completing the project. See Ch. 9 of The PMBOK® Guide.
<b>Project Communications Management</b>	11/25/2013	 80%	<i>More about Knowledge Area</i> Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide
<b>Project Quality Management</b>	11/25/2013	 73%	<i>More about Knowledge Area</i> The processes and activities that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. See Ch. 8 of The PMBOK® Guide





Welcome, Keir Fiske

- [Home](#)
- [Support](#)
- [Logout](#)

## Your survey is ready to submit

SUBMIT SURVEY

Submit your responses and see your results.

### Would you like to review your responses?

Select "Revise" to open your question and select a different response.

- 1.

Your teams use a consistent way to regularly check actual performance against what they had planned?

[Revise](#) Response: **Always**

- 2.

Your teams consistently estimate the resources that are required to deliver on their commitments?

[Revise](#) Response: **Always**

- 3.

Your team leaders use a consistent method for collecting and distributing performance information about their initiatives?

[Revise](#) Response: **Often**

- 4.

Your teams complete contracts with suppliers before moving on to their next project?

[Revise](#) Response: **Often**

- 5.

Your teams use a consistent method to determine how they will communicate with people impacted by their projects?

Revise Response: **Often**

- 6.

Your teams use a standard method for reviewing and approving changes to what the team is doing?

Revise Response: **Always**

- 7.

Your teams consistently document the things that their teams will deliver and what they will not deliver?

Revise Response: **Always**

- 8.

Your teams proactively plan how they will procure goods and services necessary to deliver on their commitments?

Revise Response: **Sometimes**

- 9.

Your teams use a standard method for reviewing and approving changes to the project?

Revise Response: **Always**

- 10.

Your teams proactively plan how they will respond during a crisis that comes up during their project?

Revise Response: **Often**

- 11.

Your teams use a standard method to quantitatively analyze risks that may come up during their projects?

Revise Response: **Often**

- 12.

Your teams use a standard method for determining budgets?

Revise Response: **Always**

- 13.

Your project team leaders use a standard method for managing their teams that is consistent from team to team?

Revise Response: **Often**

- 14.

Your teams use a consistent method to close the current project and release resources before moving on to their next project?

Revise Response: **Always**

- 15.

Your project teams use a standard method for monitoring and recording quality activities?

[Revise](#) *Response: Often*

- 16.

The people in charge of running your projects use a consistent way to document a plan showing how they will define, prepare, integrate and coordinate their initiatives?

[Revise](#) *Response: Often*

- 17.

Your project teams use a standard method for collecting information from customers of the project to determine what they need?

[Revise](#) *Response: Often*

- 18.

Your teams use a consistent way to communicate information about what's going on with their project?

[Revise](#) *Response: Often*

- 19.

Your teams use a standard method to manage expectations of people affected by your projects?

[Revise](#) *Response: Often*

- 20.

Your teams consistently perform the activities that are planned to execute a project?

[Revise](#) *Response: Often*

- 21.

Your project teams use a standard method for procuring needed projects and services?

[Revise](#) *Response: Always*

- 22.

Your teams consistently document roles and responsibilities, organization charts and staffing plans?

[Revise](#) *Response: Sometimes*

- 23.

Your teams use a consistent method for putting all of the work activities for a project into a logical sequence?

[Revise](#) *Response: Often*

- 24.

Your project teams use a standard method for obtaining formal acceptance of their deliverables from the customer or sponsor?

[Revise](#) Response: **Always**

- 25.

The people in charge of running your initiatives use a consistent way to describe everything their initiative will deliver that is broken down into manageable pieces?

[Revise](#) Response: **Always**

- 26.

Your teams use a consistent way to develop their team members so they are able to contribute most effectively?

[Revise](#) Response: **Sometimes**

- 27.

Your teams use a standard method to proactively identify risks that may come up during their projects?

[Revise](#) Response: **Often**

- 28.

Your teams use a standard method to document how they will manage risk during their projects?

[Revise](#) Response: **Often**

- 29.

Your organization consistently identifies people that will be affected by your projects?

[Revise](#) Response: **Often**

- 30.

Your project leaders use a standard method to analyze the actual costs against the budget and manage changes in order to meet commitments?

[Revise](#) Response: **Often**

- 31.

Your teams use a standard method to qualitatively analyze risks that may come up during their projects?

[Revise](#) Response: **Often**

- 32.

Your teams consistently review things that might go wrong on their project and make changes to them based on current conditions?

[Revise](#) Response: **Often**

- 33.

Your teams use a consistent method for estimating the length of time it will take to complete each of their work activities?

[Revise](#) Response: **Often**

- 34.

Your leadership consistently documents their initial expectations for a project and assign a project manager?

[Revise](#) Response: **Always**

- 35.

All of your teams develop standard schedules consistently?

[Revise](#) Response: **Often**

- 36.

Your teams use a standard method for managing procurement relationships and making contract changes with suppliers as needed?

[Revise](#) Response: **Always**

- 37.

Your teams consistently think about and document how they will integrate quality into their projects?

[Revise](#) Response: **Sometimes**

- 38.

Your teams use a standard method to audit project results against the quality plans that you've put in place?

[Revise](#) Response: **Often**

- 39.

Your teams use a consistent method for writing down all of the work activities necessary to deliver on their commitments?

[Revise](#) Response: **Often**

- 40.

Your project leaders use a standard method to analyze the schedule and manage changes in order to meet commitments?

[Revise](#) Response: **Always**

- 41.

Your organization uses a standard method for your team leaders to acquire project teams?

[Revise](#) Response: **Often**

- 42.

Your teams use a consistent way to estimate costs for the work necessary to complete a project?

[Revise](#) *Response: Always*



Submit your responses and see your results



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## **PMI PM BENCHMARKING SURVEY**

KAF FOR NALCOR P.E.T.S. NOVEMBER 2013

### Score Legend

- 5) Always (more than 80% of the time)
- 4) Often (61% to 80% of the time)
- 3) Sometimes (41% to 60% of the time)
- 2) Occasionally (21% to 40% of the time)
- 1) Rarely (Less than 21% of the time)

### **1) Your teams use a consistent way to regularly check actual performance against what they had planned?**

*5/5 Observed Improved Plan (Schedule Development & Monitoring)*

*Previously Q.13. 1/5 – no observation of where any Planned to date is being tracked. Expenditures are known and viewed against current budgets. Earned Value Monitoring was not observed to being developed.*

### **2) Your teams consistently estimate the resources that are required to deliver on their commitments?**

*5/5 – No Change*

*Previously Q.5. 5/5 – Although not perfected there is a consistent approach in place to estimate the individual projects and an overall compiled record of Program resource requirements.*

### **3) Your team leaders use a consistent method for collecting and distributing performance information about their initiatives?**

*4/5 – No Change*

*Previously Q.32. 4/5 – The Project Dashboards are regularly updated and shared amongst the overall group and used in Status reporting to the teams. Observed to be very good summary tool.*

### **4) Your teams complete contracts with suppliers before moving on to their next project?**

*4/5 – No Change*

*Previously Q.41. 4/5 – no direct observation of this in any formal document or procedure however knowledge from the Resource Planning exercises it is apparent that the conclusion of the previous years projects are important steps to complete before the next years projects begin.*

### **5) Your teams use a consistent method to determine how they will communicate with people impacted by their projects?**

*4/5 – No Change*

*Previous Q.38. 4/5 – I did not have any observation or incite to this and therefore selected a supportive score.*

### **6) Your teams use a standard method for reviewing and approving changes to what the team is doing?**

*5/5 – No Change*

*Previous Q.12. 5/5 – Detailed Change processes are in place and observer to being followed where applicable.*

**7) Your teams consistently document the things that their teams will deliver and what they will not deliver?**

*5/5 – Consistent and Complete Schedules are being Developed for all Regulated Projects. Implementation for all projects is underway.*

*Previously Q.6. 3/5 – Project Design Transmittals are done on every project and these contain the high level scope of work. There is not a more detailed Scope and there is not a documentation of what is not going to be delivered.*

**8) Your teams proactively plan how they will procure goods and services necessary to deliver on their commitments?**

*3/5 – No Change*

*Previously Q.23. 3/5 – Plan preparation in general is in need of improvements. No observation of a documented Procurement or Consultant plan.*

**9) Your teams use a standard method for reviewing and approving changes to the project?**

*5/5 – No Change*

*Previously Q.35. 5/5 - . The Design Change process and Contract Change process are followed in order to manage changes to the Budgets, Schedule, and Scope.*

**10)Your teams proactively plan how they will respond during a crisis that comes up during their project?**

*4/5 – No Change*

*Previously Q.21. 4/5 – I did not have any observation or incite to this and therefore selected a supportive score.*

**11)Your teams use a standard method to quantitatively analyze risks that may come up during their projects?**

*4/5 – Risk Management Procedure has been developed, Policy in PMM still needs to be developed*

*Previously Q.42. 1/5- Major identified Risks are noted on Project Dashboards and mitigation measures are documented for these. No evidence of Risk Analysis is done in any formal process.*

**12)Your teams use a standard method for determining budgets?**

*5/5 – No Change*

*Previously Q.33. 5/5 – All budgets are generated during the Capital Budget Proposal stage.*

**13)Your project team leaders use a standard method for managing their teams that is consistent from team to team?**

*4/5 – PMM is being followed on Most projects. Additional procedures have been developed. PMM is currently being updated.*

*Previously Q.1. 3 /5 – Selected on basis that the PMM is not consistently followed and observation in project reviews that the PMs each managed and were managed in different ways.*



**14)Your teams use a consistent method to close the current project and release resources before moving on to their next project?**

*5/5 – No Change*

*Previously Q.20. 5/5 – Project Close out procedures are in the PMM and followed by the PMs reviewed discussing past projects.*

**15)Your project teams use a standard method for monitoring and recording quality activities?**

*4/5 – RoadMap to Success does a quarterly review on all projects and is very effective. PMM update is required.*

*Previously Q.4. 2/5 – Design QA is monitored as per the procedure for signing, sealing and approving Engineering Drawings and documents. However for PM QA there is no process in place or followed, this being a PM benchmarking Survey score selected accordingly. 1 PM used the PMM TOC to use as a checklist.*

**16)The people in charge of running your projects use a consistent way to document a plan showing how they will define, prepare, integrate and coordinate their initiatives?**

*4/5 – The Design Transmittals have developed into Project Specific Execution Plans. This is a significant improvement with details for most projects being addressed therein.*

*Previously Q.31. 1/5 – Other than the Project design Transmittal there is not any formal process or plan in place that addresses this. A Project Specific Execution Plan is needed for every project in order to address these and other items.*

**17)Your project teams use a standard method for collecting information from customers of the project to determine what they need?**

*4/5 – No Change*

*Previously Q.25. 4/5 – I did not have any observation or incite to this and therefore selected a supportive score.*

**18)Your teams use a consistent way to communicate information about what's going on with their project?**

*4/5 – No Change*

*Previously Q.24. 4/5 – Regular team meetings are scheduled and carried out during the execution of every project.*

**19)Your teams use a standard method to manage expectations of people affected by your projects?**

*4/5 – No Change*

*Previously Q.40. 4/5 – I did not have any observation or incite to this and therefore selected a supportive score.*

**20)Your teams consistently perform the activities that are planned to execute a project?**

*4/5 –Much improved Schedule/ Plan Development with regular Monitoring. Most projects are Trending ontrack.*

*Previously Q.14. 2/5 – With no detailed plans created this can only be observed that each PM sets the look ahead work at the Progress meetings.*

**21)Your project teams use a standard method for procuring needed projects and services?**

*5/5 – No Change*

*Previously Q.17. 5/5 – The Supply Chain Management process is carefully followed by all teams. Highly governed process for award and change approvals.*

**22)Your teams consistently document roles and responsibilities, organization charts and staffing plans?**

*3/5 – No Change*

*Previous Q.11. 3/5 – Project Org Charts or staff plans did not exist in the observed reviews. Organizational overall staffing requirements are being developed and overall Organization charts/plans have been developed.*

**23)Your teams use a consistent method for putting all of the work activities for a project into a logical sequence?**

*4/5 – Consistent and complete schedules are being*

*Previously Q.7. 1/5 – During observations it was left to each PM to develop the project Planning, scheduling was not developed beyond the 2011 Resource Loading. Consistency is the question and that was not observed.*

**24)Your project teams use a standard method for obtaining formal acceptance of their deliverables from the customer or sponsor?**

*5/5 – No Change*

*Previously. Q.10. 5/5 – Formal Project Completion and Sign off is followed. Not observed directly however statements confirming of this and review of the PMM show confirmation.*

**25)The people in charge of running your initiatives use a consistent way to describe everything their initiative will deliver that is broken down into manageable pieces?**

*5/5 – On all projects reviewed the scope of work is well defined and is broken down into manageable components.*

*Previously Q.39. 3/5 – Although there is a Capital Budget Proposal and Project Design Transmittal created for each project it was not observed any breakdown of the Scope of work in these documents.*

**26) Your teams use a consistent way to develop their team members so they are able to contribute most effectively?**

*3/5 – No Change*

*Previously Q.29. 3/5 – Mentoring is in place informally and observation was that some personnel may not be receiving the full supportive direction they need. Noteworthy that this could be directly related to the increase in both workload and increasing new workers.*

**27) Your teams use a standard method to proactively identify risks that may come up during their projects?**

*4/5 – Risk Management is in place and all projects are actively engaged. PMM needs to be updated to include this policy/procedure.*

*Previously Q.3. 2/5 – Major risks are standardly identified on the Dashboard however no formal risk mgmt policy is available. And there is not any formal risk register or similar tracked on projects.*

**28) Your teams use a standard method to document how they will manage risk during their projects?**

*4/5 – Risk Management has been implemented and the risk register is the document of record for projects.*

*Previously Q.22. 3/5- Similar to PreviousQ.18 Major identified Risks are noted on Project Dashboards and mitigation measures are documented for these. Regular team meetings are forums for discussing and developing solutions to known issues.*

**29) Your organization consistently identifies people that will be affected by your projects?**

*4/5 – No Change*

*Previously Q.28. 4/5 – Stakeholders are identified during the Capital Budget Proposal and are further identified in the Project Design Transmittal.*

**30) Your project leaders use a standard method to analyze the schedule and manage changes in order to meet commitments?**

*4/5 – Most projects are being analyzed at a minimum monthly thru the “Red Line” Schedule Review meetings*

*Previously Q.37. 1/5 – Without the generation of a Project Schedule that is monitored and progressed there is not a standardized method followed to monitor schedule plans.*

**31) Your teams use a standard method to qualitatively analyze risks that may come up during their projects?**

*4/5- Risk Management is in place and being followed by most projects. PMM is scheduled to be updated.*

*Previously Q.27. 1/5- Major identified Risks are noted on Project Dashboards and mitigation measures are documented for these. No evidence of Risk Analysis is done in any formal process.*

**32)Your teams consistently review things that might go wrong on their project and make changes to them based on current conditions?**

*4/5 – Risk Management has been implemented and documented on most projects.*

*Previously Q.18. 3/5 – Major identified Risks are noted on Project Dashboards and mitigation measures are documented for these. Regular team meetings are forums for discussing and developing solutions to known issues.*

**33)Your teams use a consistent method for estimating the length of time it will take to complete each of their work activities?**

*4/5 – No Change*

*Previously Q.30. 4/5 – Initial Capital Budget proposals are generated consistently and using a assigned estimating group. Individual teams provide forecasts in varying manors during the execution of the projects.*

**34)Your leadership consistently documents their initial expectations for a project and assign a project manager?**

*5/5 – No Change*

*Previously Q.26. 5/5 – Each project has a Capital Budget Proposal created and following which a PM is assigned and Project design transmittal is generated.*

**35)All of your teams develop standard schedules consistently?**

*4/5 – Almost all project now following standard scheduling practice and regular reviews (Red Line) are held monthly.*

*Previously Q.36. 1/5 – Of the projects reviewed none had developed a project schedule to follow and monitor the work. The 2011 Resource Plan Schedules Created in Late 2010 early 2011 are all that was in the project files for each.*

**36)Your teams use a standard method for managing procurement relationships and making contract changes with suppliers as needed?**

*5/5 – No Change*

*Previously Q.15. 5/5 – The Supply Chain Management process is carefully followed by all teams. Highly governed process for award and change approvals.*

**37)Your teams consistently think about and document how they will integrate quality into their projects?**

*3/5 – did notice improvement with the use of the RoadMaps to success and the details in the design transmittals. The PMM is noted to be updated accordingly to document what all projects must do.*

*Previously Q.19. 2/5 – PM Quality Management plans are not developed or documented during the design phase of projects. QA/QC requirements during Construction are well developed and documented.*

**38)Your teams use a standard method to audit project results against the quality plans that you've put in place?**

*4/5 – RoadMaps to Success as well as the project dashboards contain the review items and they are reviewed regularly.*

*Previously Q.2. 1/5 – no observation of any project Auditing being performed.*

**39) Your teams use a consistent method for writing down all of the work activities necessary to deliver on their commitments?**

*4/5 – Regular documented items (Design transmittals, Schedule reviews, Risk reviews) are observed to contain most the noted scope that is to be delivered.*

*Previously Q.16. 2/5 – No direct observation that this was being done, however score is based on assumption that some documented action logs are created during team meetings.*

**40) Your project leaders use a standard method to analyze the actual costs against the budget and manage changes in order to meet commitments?**

*5/5 – No Change*

*Previously Q.34. 5/5 – The JDE system is used to monitor the actual expenditures vs. Budget. The Design Change process and Contract Change processes are followed in order to manage changes to the Budgets.*

**41) Your organization uses a standard method for your team leaders to acquire project teams?**

*4/5 – No Change*

*Previously Q.8. 4/5 – it was observed that the method is standard that the PM has a pool of personnel that there team is appointed or selected from.*

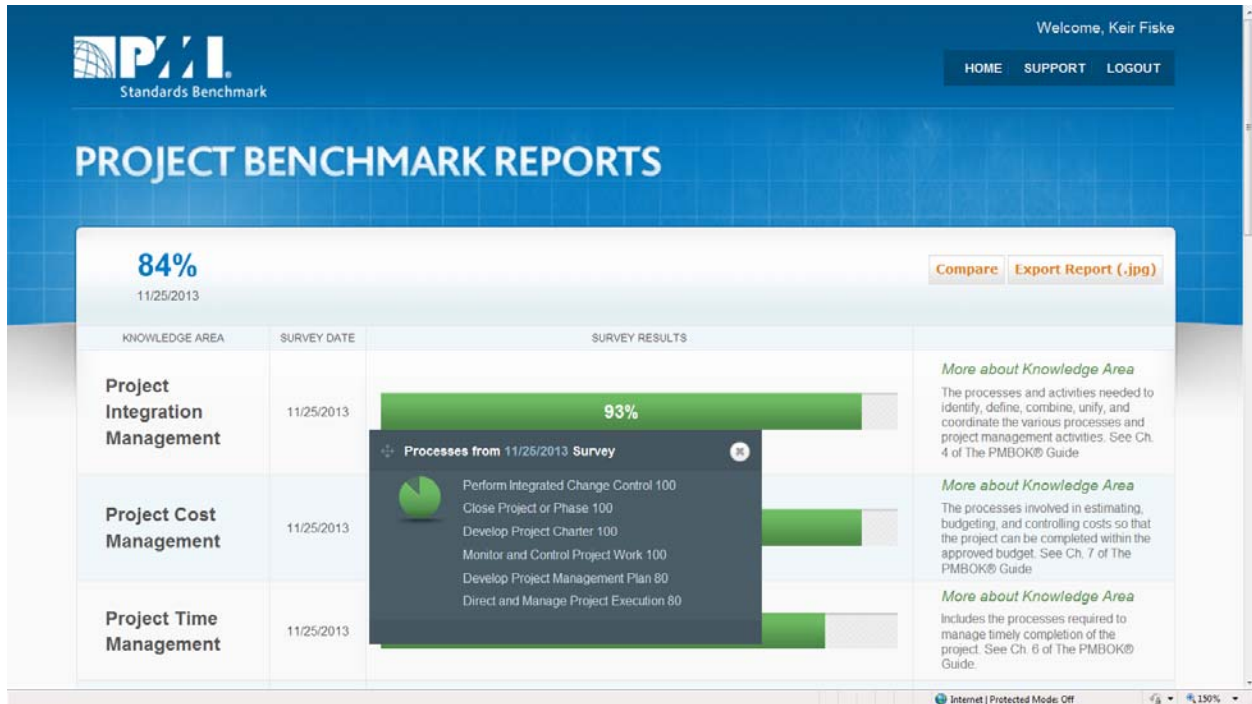
**42) Your teams use a consistent way to estimate costs for the work necessary to complete a project?**

*5/5 – No Change*

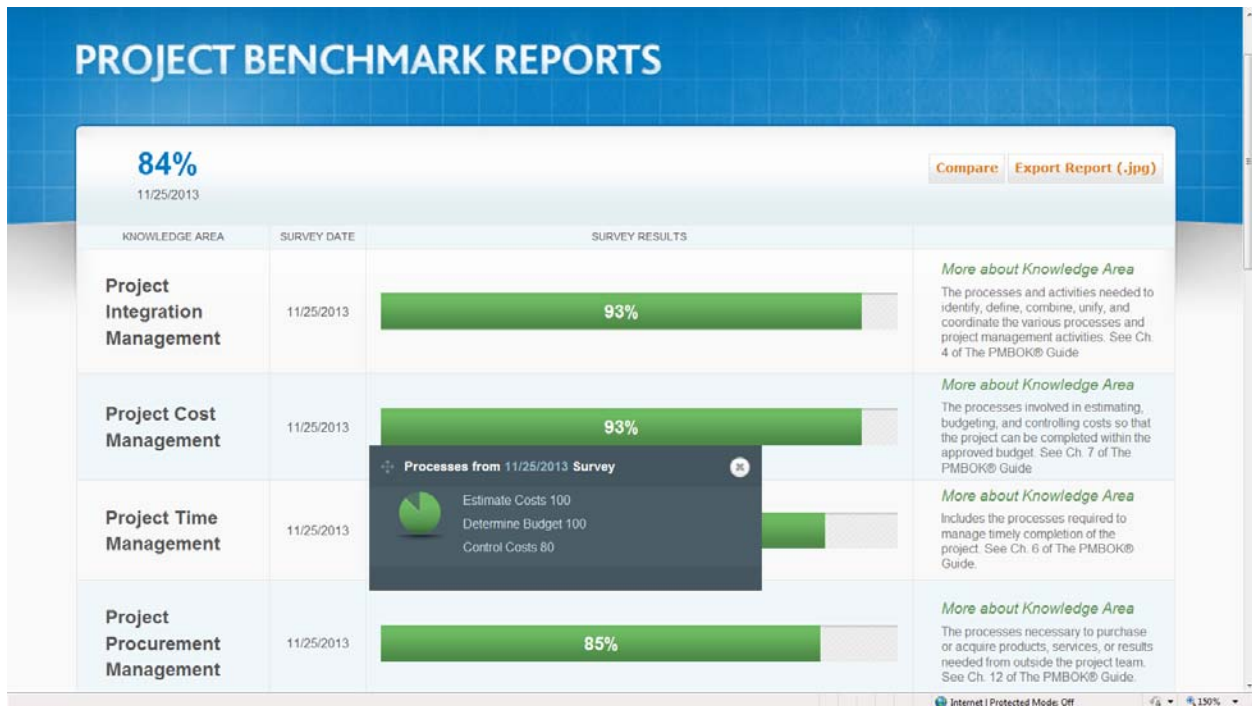
*Previously Q.9. 5/5 – The initial estimates are consistently developed thru the development of Capital Budget Proposals. And a Estimating group is now in place preparing all the Capital Budget Proposals.*

**Screenshots from the PMI Standards Benchmark Report** November 25, 2013

**PROJECT INTEGRATION MANAGEMENT:**



**PROJECT COST MANAGEMENT:**



**Screenshots from the PMI Standards Benchmark Report** November 25, 2013

**PROJECT TIME MANAGEMENT:**

KNOWLEDGE AREA	SURVEY DATE	SURVEY RESULTS	
Project Integration Management	11/25/2013	93%	<a href="#">More about Knowledge Area</a> The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide.
Project Cost Management	11/25/2013	93%	<a href="#">More about Knowledge Area</a> The processes involved in estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide.
Project Time Management	11/25/2013	86%	<a href="#">More about Knowledge Area</a> Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.
Project Procurement Management	11/25/2013		<a href="#">More about Knowledge Area</a> The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.
Project Scope Management	11/25/2013		<a href="#">More about Knowledge Area</a> The processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. See Ch. 5 of The PMBOK® Guide.
Project Risk Management	11/25/2013	80%	<a href="#">More about Knowledge Area</a> The processes of conducting risk management planning, identification, analysis, response planning, and monitoring and control on a project. See

**Processes from 11/25/2013 Survey**

- Sequence Activities 80
- Estimate Activity Resources 100
- Control Schedule 100
- Estimate Activity Durations 80
- Develop Schedule 80
- Define Activities 80

**PROJECT PROCUREMENT MANAGEMENT:**

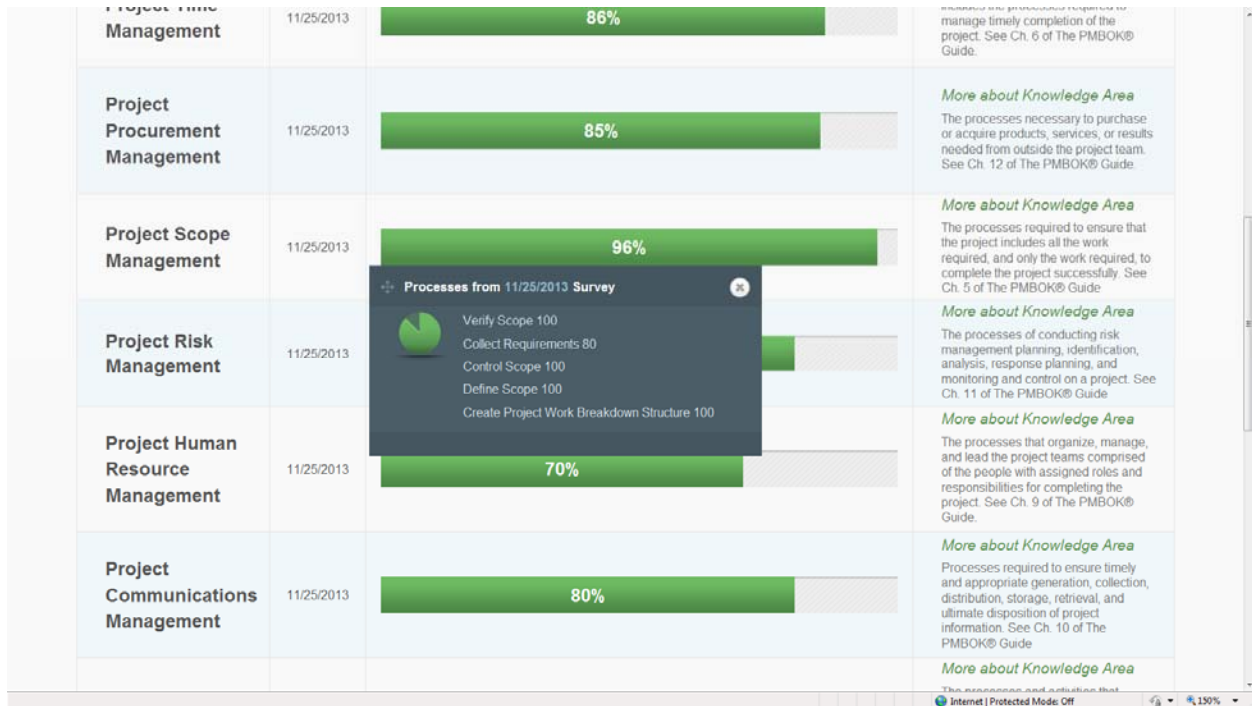
Management	11/25/2013	93%	<a href="#">More about Knowledge Area</a> budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide.
Project Time Management	11/25/2013	86%	<a href="#">More about Knowledge Area</a> Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.
Project Procurement Management	11/25/2013	85%	<a href="#">More about Knowledge Area</a> The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.
Project Scope Management	11/25/2013		<a href="#">More about Knowledge Area</a> The processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. See Ch. 5 of The PMBOK® Guide.
Project Risk Management	11/25/2013		<a href="#">More about Knowledge Area</a> The processes of conducting risk management planning, identification, analysis, response planning, and monitoring and control on a project. See Ch. 11 of The PMBOK® Guide.
Project Human Resource Management	11/25/2013	70%	<a href="#">More about Knowledge Area</a> The processes that organize, manage, and lead the project teams comprised of the people with assigned roles and responsibilities for completing the project. See Ch. 9 of The PMBOK® Guide.
Project			<a href="#">More about Knowledge Area</a> Processes required to ensure timely and appropriate generation, collection,

**Processes from 11/25/2013 Survey**

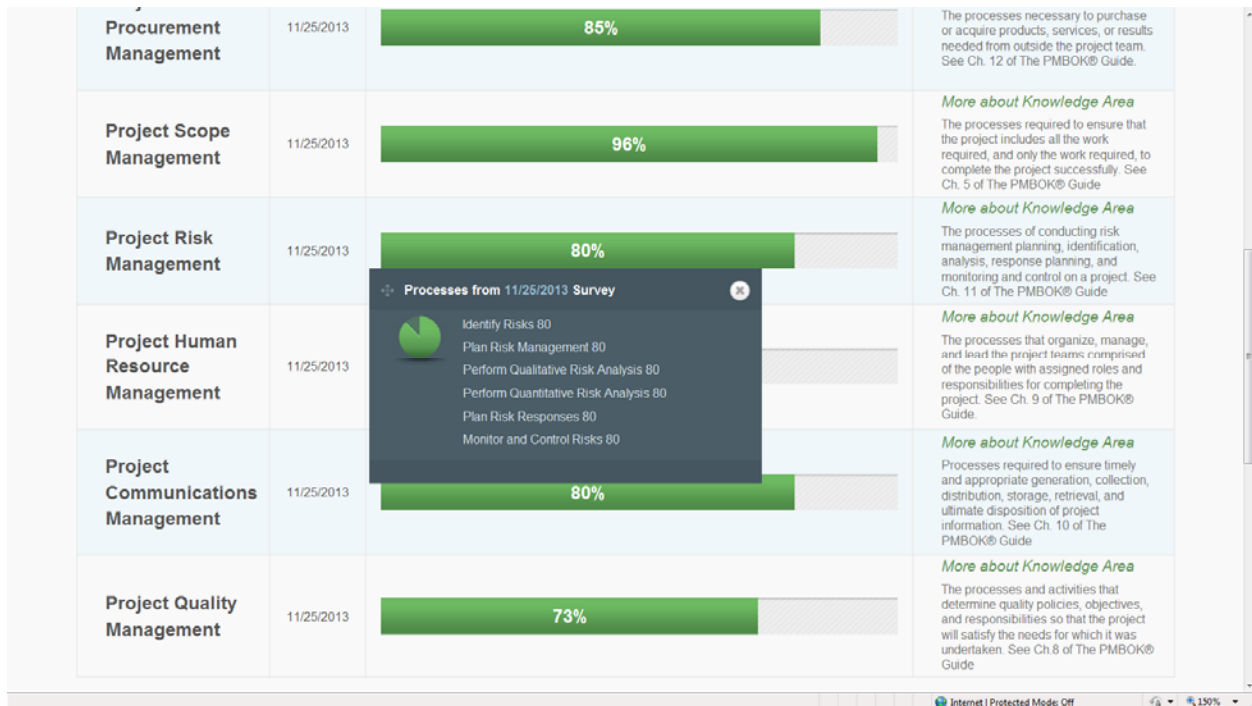
- Close Procurements 80
- Conduct Procurements 100
- Administer Procurements 100
- Plan Procurements 60

**Screenshots from the PMI Standards Benchmark Report** November 25, 2013

**PROJECT SCOPE MANAGEMENT:**



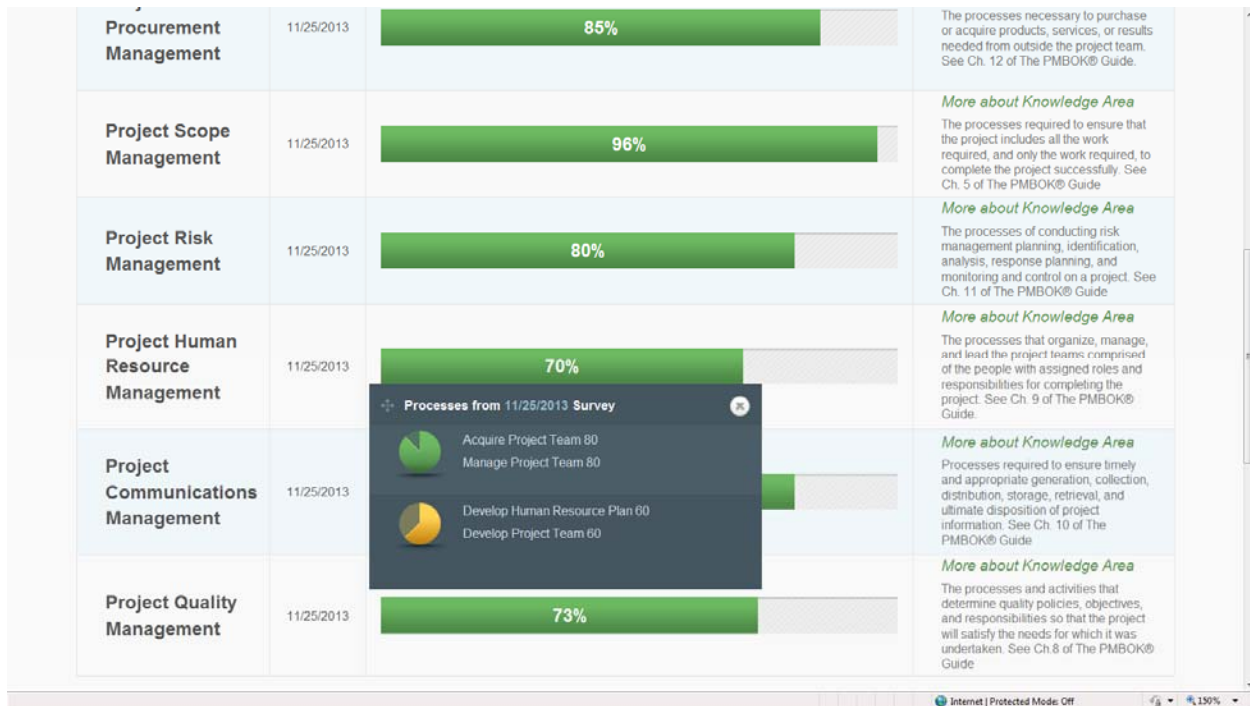
**PROJECT RISK MANAGEMENT:**



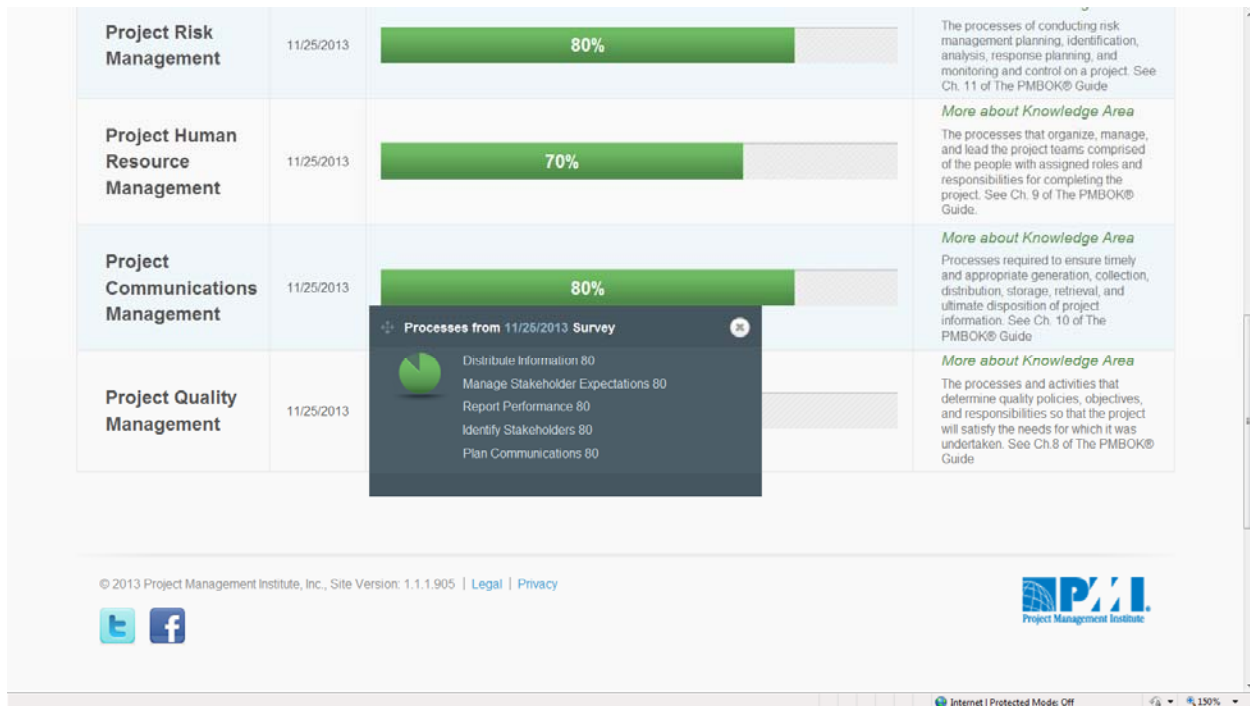


**Screenshots from the PMI Standards Benchmark Report** November 25, 2013

**PROJECT HUMAN RESOURCE MANAGEMENT:**






**PROJECT COMMUNICATIONS MANAGEMENT:**






**Screenshots from the PMI Standards Benchmark Report** November 25, 2013


**PROJECT QUALITY MANAGEMENT:**


<p><b>Project Human Resource Management</b></p>	<p>11/25/2013</p>	 <p>70%</p>	<p><i>more about Knowledge Area</i> The processes that organize, manage, and lead the project teams comprised of the people with assigned roles and responsibilities for completing the project. See Ch. 9 of The PMBOK® Guide.</p>
<p><b>Project Communications Management</b></p>	<p>11/25/2013</p>	 <p>80%</p>	<p><i>More about Knowledge Area</i> Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide</p>
<p><b>Project Quality Management</b></p>	<p>11/25/2013</p>	 <p>73%</p>	<p><i>More about Knowledge Area</i> The processes and activities that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. See Ch.8 of The PMBOK® Guide</p>

**Processes from 11/25/2013 Survey**

-  Perform Quality Control 80
-  Perform Quality Assurance 80
-  Plan Quality 60

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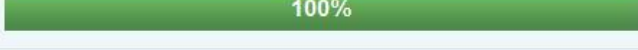

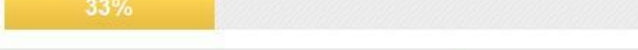

20410-000 OB  
2013 P.E.T.S.  
PM BENCHMARKING REPORT

## APPENDIX B

### PMI Benchmarking Comparison 2011 versus 2013

November 25, 2013

**Nalcor Energy P.E.T.S. PMI Benchmarking Survey Comparison 20131125**

KNOWLEDGE AREA	SURVEY DATE	SURVEY RESULTS	
Project Scope Management	8/16/2011	 80%	<i>More about Knowledge Area</i> The processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. See Ch. 5 of The PMBOK® Guide
	11/25/2013	 96%	
Project Human Resource Management	8/16/2011	 65%	<i>More about Knowledge Area</i> The processes that organize, manage, and lead the project teams comprised of the people with assigned roles and responsibilities for completing the project. See Ch. 9 of The PMBOK® Guide.
	11/25/2013	 70%	
Project Risk Management	8/16/2011	 46%	<i>More about Knowledge Area</i> The processes of conducting risk management planning, identification, analysis, response planning, and monitoring and control on a project. See Ch. 11 of The PMBOK® Guide
	11/25/2013	 80%	
Project Communications Management	8/16/2011	 80%	<i>More about Knowledge Area</i> Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide
	11/25/2013	 80%	
Project Procurement Management	8/16/2011	 85%	<i>More about Knowledge Area</i> The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.
	11/25/2013	 85%	
Project Time Management	8/16/2011	 46%	<i>More about Knowledge Area</i> Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.
	11/25/2013	 86%	
Project Integration Management	8/16/2011	 63%	<i>More about Knowledge Area</i> The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide
	11/25/2013	 93%	
Project Cost Management	8/16/2011	 100%	<i>More about Knowledge Area</i> The processes involved in estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide
	11/25/2013	 93%	
Project Quality Management	8/16/2011	 33%	<i>More about Knowledge Area</i> The processes and activities that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. See Ch.8 of The PMBOK® Guide
	11/25/2013	 73%	

20410-000 OB  
2013 P.E.T.S.  
PM BENCHMARKING REPORT

## APPENDIX C

### Interview Review Notes

## PM Benchmarking - Projects Review Session #1

Project Name: Churchill Falls - Unit(s) Controls Upgrade

Project Manager: Craig T Power (PMP, Seasoned, Multidiscipline)

Magnitude Budget: \$52M % Complete: 15%

Project Start Date: Apr-11 Project End Date: Dec-21

### Checklist items Project #1

		YES	NO
D	Project Specific Execution Plan (Study scope Statement 06.12) comp.	X	
	available and viewed during this review.	X	
Notes: The design Transmittal has been updated as project is now in 2nd yr. The level of details contained in the Design Tranmittal are satisfying the Project Specific PEP requirments well.			
Viewed: The Project Design Transmittal			
E1	06.14.1b Master Schedule created.	X	
	available and viewed during this review.	X	
Notes: Master Schedule is in place. This is a multi year project so current active year is detailed.			
Viewed: Project Schedule was reviewed			
E2	06.42 Status reporting and Schedule updates done.	X	
	available and viewed during this review.	X	
Notes: Monthly "Red line" Review meeting are held and scedules are updated monthly at a minimum.			
Viewed: Progressed aschedules were reviewed			
F	08.01 Quality Assurance measures for project identified.	X	
	available and viewed during this review.	X	
Notes: Project Execution Roadmap / Dashboard contains the steps every project must complete. Monthly Dashboard meetings, Qtr'ly Road Map review meedings held			
Viewed: Dashboard & Road Map			
K	Is a Project Risk Management Plan created and followed?	X	
	available and viewed during this review.	X	
Notes: Project held a 2 day Risk session in March 2012 c/w 3rd party facilitator. Risk Register is in place and being regularly updated and addressed.			
Viewed: reviewed the Project Risk Register			

Other Additional comments from reviewee.

- 1) Feels that the Scheduling efforts are useful ad supportive of PM needs
- 2)
- 3)

## PM Benchmarking - Projects Review Session #2

Project Name: Farewell Head

Project Manager: Paul Dilion ( Single Discipline)

Magnitude Budget: \$1M % Complete: 90%

Project Start Date: Mar-13 Project End Date: Dec-13

### Checklist items Project #2

		YES	NO
D	Project Specific Execution Plan (Study scope Statement 06.12) comp.	X	
	available and viewed during this review.	X	
Notes: Design Transmittal includes scope & other applicable details. Additionally on this project there is a Construction Work Package			
Viewed: Design Transmittal, Construction Work Package, Safety & Health Plan			
E1	06.14.1b Master Schedule created.	X	
	available and viewed during this review.	X	
Notes: Intitial Schedul is created, and is reviewed only for milestone achievment			
Viewed: Schedule			
E2	06.42 Status reporting and Schedule updates done.	X	
	available and viewed during this review.	X	
Notes: The Schedule is not updated on this project regularly, it is referenced to see if milestones are being achieved only. Construction progress is reviewed weekly.			
Viewed: Schedule			
F	08.01 Quality Assurance measures for project identified.	X	
	available and viewed during this review.	X	
Notes: Roadmap as well as Dashboard are set up and used on this project. Additionally Paul is following the PMM Project Checklist as he wraps up the 2013 year.			
Viewed: Dashboard, Roadmap & the checklist.			
K	Is a Project Risk Management Plan created and followed?		X
	available and viewed during this review.	X	
Notes: Risk Register was reviewed, although created it was not a live document regularly reviewed. Most risks with Pole Mgmt are reoccurring and mostly listed as post mitigated.			
Viewed: Risk Register			

Other Additional comments from reviewee.

- 1)
- 2)
- 3)

## PM Benchmarking - Projects Review Session #3

Project Name: Town Center Envelope Upgrade (Rec Center & Commercia, Phase 2)

Project Manager: Steven Drew

Magnitude Budget: \$4.5M % Complete: 90%

Project Start Date: Feb-13 Project End Date: Dec-13

### Checklist items Project #3

		YES	NO
D	Project Specific Execution Plan (Study scope Statement 06.12) comp.	X	
	available and viewed during this review.	X	
Notes: Design Transmittal contains Scope, Communications, Team, Safety, and Schedule. Updated and treated as a live document			
Viewed: Design Transmittal			
E1	06.14.1b Master Schedule created.	X	
	available and viewed during this review.	X	
Notes: Master Schedule is created and used by this project. This is the active progressed schedule as well.			
Viewed: Master Schedule			
E2	06.42 Status reporting and Schedule updates done.	X	
	available and viewed during this review.	X	
Notes: Monthly "Red Line" review is done and schedule is updated accordingly Weekly Construction meetings ( Daily as punchlist items are underway)			
Viewed: Schedule was available for multiple months (Updated regularly)			
F	08.01 Quality Assurance measures for project identified.	X	
	available and viewed during this review.	X	
Notes: Dashboard is reviewed Monthly, Qtr'ly RoadMap review's conducted. Weekly Construction meetings ( Daily as punchlist items are underway)			
Viewed: Dashboard & Roadmap			
K	Is a Project Risk Management Plan created and followed?		X
	available and viewed during this review.	X	
Notes: Risk review session was held prior to contract award with initial risk register created. Register has not been updated since creation but a planned review will be before closeout.			
Viewed: Risk Register			

Other Additional comments from reviewee.

- 1)
- 2)
- 3)



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PM Standards  
Benchmarking Report**



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November 3, 2015

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## **Executive Summary**

### **Overview**

This report provides a written summary of the 2015 Project Management Benchmarking review performed by Stantec on the Project Management systems in use by the Nalcor Project Execution and Technical Services (P.E.T.S.) Group. This review was conducted to measure progress and improvements made since the initial PM Benchmarking Study that was conducted in 2011 and then reviewed again in 2013. In March of 2011 Stantec was asked to provide review of the existing Project Management Manual (PMM) and associated systems in order to provide a Benchmark for comparison and improvement. The initial study concluded with a findings report submitted in August of 2011 and a subsequent review report in December of 2013. This 2015 review evaluated progress made on recommendations that were included in the December 2013 report (Section 4.0, pg 4.1).

To support the review and provide consistency the notes gathered during the current exercise were to obtain knowledge necessary to complete an online Survey hosted by PMI.org on PM Standards Benchmarking. (<https://standardsbenchmark.pmi.org>)

### **Summary**

As of this review the Nalcor P.E.T.S. group survey results indicate performance that is at Top of Class concerning project management standards and project execution methodology. In comparing the initial standards benchmarking exercise and the current it is evident that the project management standards have greatly improved with the ongoing focus of doing so.

The results of the online PM Standards Benchmarking Survey indicate that the P.E.T.S. Group obtained 92% compliance with the following PM Knowledge Areas. The survey scores for P.E.T.S. were:

Project Risk Management	96%
Project Procurement Management	90%
Project Communications Management	88%
Project Quality Management	80%
Project Time Management	93%
Project Cost Management	100%
Project Integration Management	96%
Project Human Resources Management	85%
Project Scope Management	96%
<b>Overall Score</b>	<b>92%</b>

The above results show a significant improvement that is up by 27% overall from 2011 to 2015 period and up 8% from 2013 to 2015. Since 2013 the top three (3) areas that showed the greatest process improvement in score results are Risk Management: up 16%, Human Resources Management: up 15% and Communications Management: up 8%. Furthermore since 2011 the top three (3) areas that showed the greatest process improvement in score results are Risk Management: up 50%, Quality Management: up 47% and Time Management: up 47%.



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## **1.0 PROJECT DESCRIPTION**

### **1.1 PROJECT OVERVIEW**

A specific group within Nalcor has been created to oversee and execute capital projects both for the Regulated and Non-Regulated business sectors. This group is known as the "Project Execution and Technical Services Team" or P.E.T.S. Along with the creation of this team a plan was defined for the review of processes and procedures that were implemented and how well these were being followed. This review was to assess the effectiveness of the processes and procedures and determine if they were appropriate for the capital projects works performed. As part of these overall procedures the area a key focus for the P.E.T.S. group is Project Management.

In March 2011 Stantec was contacted to provide a high level review of the current P.E.T.S. Project Management Manual (PMM) and associated systems in order to provide a benchmark for comparative and improvement purposes. This initial review concluded with a findings report submitted in August of 2011.

In October of 2013 Stantec was contacted to provide a review of the activities within the Nalcor P.E.T.S. Group and to observe and report on the improvements made (between 2011 and 2013) on the 2011 report recommendations. (These recommendations can be found in the 2013 report, section 4.0, page 4.1).

In September of 2015 Stantec was contacted again to provide a review of the activities within the Nalcor P.E.T.S. Group and to observe and report on the improvements made (between 2013 and 2015) on the 2013 report recommendations. (These recommendations can be found in the 2013 report, section 4.0, pg 4.1). To accomplish this Stantec conducted interview sessions on September 21, 2015 with three (3) Project managers to review selected active projects and with the Lead Scheduler to review the processes in place for master schedule generation and project plan reviews.

## 2.0 REVIEWS AND PMI SURVEY INFORMATION

### 2.1 PM REVIEW SESSION

During September 2015 project interviews were conducted with three (3) selected P.E.T.S. project managers with projects that were currently underway. The projects review consisted of discussions with each project manager that focused on the 2013 PM Standards Benchmarking Report recommendations and gathering the necessary information to complete the online Survey hosted by PMI.org on PM Benchmarking. (<https://standardsbenchmark.pmi.org>)

The three (3) project managers selected for review were selected based on the following underlying project criteria that each was to be currently in progress and either;

- Multidiscipline project with a seasoned project manager, or
- Primarily single discipline project with a junior project manager, or
- A long term project with an intermediate project manager.

These criteria ensured select projects would demonstrate the applicability of current PMM processes and procedures, and to gain insight into how compliant project managers were in following these processes and procedures. And also identify process improvement commonalities that are independent of project size or work experience bias.

These review sessions are captured and summarized in Appendix D attached to this report.

### 2.2 PMI PM BENCHMARKING SURVEY

The Project Management Institute (PMI), an organization dedicated to the best practices of project management and related standards, has an online PM Benchmarking Survey available for PMI members that can be used to assess a company's performance against the standard methodology as outlined in the Project Management Body of Knowledge (PMBOK).

As in 2011 and 2013 Stantec's reviewer (a PMI member), completed this survey on behalf of P.E.T.S. The collection of information from the project managers and the survey support the review of the processes, procedures, and projects. The reviewer has grouped the available information from the project managers. The report can be found in Appendix "A" along with the questions and corresponding responses. Additional information, only available through the online review, has been captured for completeness only to better assist with understanding the overall report.






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What can be observed from the completion of this survey is best done by comparison to the similar survey that was done in 2011, 2013, and 2015 in particular, the original, three main focus areas for recommended improvement:

		<b>2011 Score (%)</b>	<b>2013 Score (%)</b>	<b>2015 Score (%)</b>	<b>Improvement (%)</b>
1	Project Risk Management	46	80	96	50
2	Project Time Management	46	86	93	47
3	Project Quality Management	33	73	80	47

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Online PMI Benchmarking Survey Comparison results data

KNOWLEDGE AREA	SURVEY DATE	SURVEY RESULTS	
Project Risk Management	10/5/2015	 96%	<i>More about Knowledge Area</i> The processes of conducting risk management planning, identification, analysis, response, planning, and monitoring and control on a project. See Ch. 11 of The PMBOK® Guide
	11/25/2013	 80%	
Project Procurement Management	10/5/2015	 90%	<i>More about Knowledge Area</i> The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.
	11/25/2013	 85%	
Project Communications Management	10/5/2015	 88%	<i>More about Knowledge Area</i> Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide.
	11/25/2013	 80%	
Project Quality Management	10/5/2015	 80%	<i>More about Knowledge Area</i> The processes and activities that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. See Ch. 8 of The PMBOK® Guide
	11/25/2013	 73%	
Project Time Management	10/5/2015	 93%	<i>More about Knowledge Area</i> Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.
	11/25/2013	 86%	
Project Cost Management	10/5/2015	 100%	<i>More about Knowledge Area</i> The processes involved in estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide
	11/25/2013	 93%	
Project Integration Management	10/5/2015	 96%	<i>More about Knowledge Area</i> The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide
	11/25/2013	 93%	
Project Human Resource Management	10/5/2015	 85%	<i>More about Knowledge Area</i> The processes that organize, manage, and lead the project teams comprised of the people with assigned roles and responsibilities for completing the project. See Ch. 9 of The PMBOK® Guide.
	11/25/2013	 70%	
Project Scope Management	10/5/2015	 96%	<i>More about Knowledge Area</i> The processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. See Ch. 5 of The PMBOK® Guide
	11/25/2013	 96%	



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## 3.0 REVIEWS

### 3.1 PROJECT REVIEWS

PM interview meetings were conducted as follows:

Date: September 21, 2015  
Location: Nalcor's Office, St. John's, NL.  
Attendees: Greg Read, Chris Belanger, Lisa Kingsley, Jessica McGrath, Tracy Doran, Keir Fiske (Santec)



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## 4.0 RECOMMENDATIONS

In comparing the initial standards benchmarking exercise and the current it is evident that the project management standards have greatly improved with the ongoing focus of doing so. With a measured score of 92% the Nalcor P.E.T.S. group indicates performance that is at Top of Class with regards to project management standards and project execution methodology.

The following recommendations are suggested to maintain the current level of performance and to steward to continued improvement:

- Complete the implementation of the recent revision of the PMM that at the time of this review was still in final Nalcor review.
- Add to the PMM a detailed Planning and Scheduling policy to capture all that has been developed in this regards. It is understood that this is currently in the works however was not available at the time of reviews.
- Implement an internal peer review of project compliance to the PMM to assure the standards are being followed as prescribed.
- Measure the trend of project success, the best indication if the standards that are in place are developed to the level suitable to the business is by the level of continued project success.

Additionally, the following improvement suggestions are provided regarding the areas that scored the lowest in the 2015 Survey.

### 80% Score in Project Quality Management

- The PMM clearly outlines and addresses the Quality Management process for/of the materials, Third party services and construction. However to improve the scoring in addition to the plans in place for the preceding items, a procedure on Quality assurance that the PMM Procedures are being followed needs to be in place. This can be done by performing periodic internal peer review audits. A suggestion of a minimum of 1 Project audit per PM per calendar year, this could be a quick checklist or more detailed Project Management reviews.

### 85% Score in Project Human Resource Management

- To improve this score there would need to identify a plan on how a project team (PM, Engineering, Project Support, Third Party, Vendors, contractors, etc.) are selected and assigned to projects. Observed is that teams are assigned by the leads as available without a defined plan on the process of team acquisition.



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## 5.0 APPENDICES

- Appendix A PMI Benchmarking Report 2013
- Appendix B PMI Benchmarking Comparison 2013 vs 2015
- Appendix C PMI Benchmarking Comparison 2011 vs 2015
- Appendix D Interview Review Summary Notes

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# APPENDIX A

PMI Benchmarking Report 2013

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2013 P.E.T.S.  
PM Benchmarking Report



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December 5, 2013

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Appendix A PMI Benchmarking Report 2013

Appendix B PMI Benchmarking Comparison 2011 versus 2013

Appendix C Interview Review Notes

## Executive Summary

### Overview

This report is to provide the written summary in regards to the 2013 Project Management Benchmarking review performed on the Project Management systems in use by the Nalcor P.E.T.S. Group. This review was conducted to measure progress and improvements made on the initial PM Benchmarking Study that was conducted in 2011. In approximately March 2011 Stantec was asked to provide an overview review of the current Project Management Manual (PMM) and associated systems in order to provide a Benchmark for comparative and improvement purposes. This initial Study concluded with a findings report submitted in August of 2011. The focus of the review this current report covers was against the recommendations that were included in the August 2011 report (Section 4.0, pg 4.1).

To support the review and provide consistency the notes received during the current exercise were to obtain knowledge necessary to complete an online Survey hosted by PMI.org on PM Benchmarking.

### Summary

Overall the Nalcor P.E.T.S. group is performing on average or above with regards to Project Management Methodology and Project Execution. Accordingly the results of the PMI.org online PM Benchmarking Survey resulted in the P.E.T.S. Group obtaining an 85% in compliance to the PM Knowledge Areas scoring as follows:

1.	Project Integration Management	93%
2.	Project Cost Management	93%
3.	Project Time Management	86%
4.	Project Procurement Management	85%
5.	Project Scope Management	96%
6.	Project Risk Management	80%
7.	Project Human Resources Management	70%
8.	Project Communications Management	80%
9.	Project Quality Management	73%

The above results show a significant improvement (up 19% overall) when compared to the 2011 Projects Reviews. Of the top three (3) areas found in 2011 for greatest need for process improvement these areas score results were Quality: +40%, Risk:+34% and Time/Plan Management: +40%.

## 1.0 Project Description

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### 1.1 PROJECT OVERVIEW

A specific group within Nalcor has been created to oversee and execute capital projects both for the Regulated and Non-Regulated business sectors. This group is known as the "Project and Execution Technical Services Team" or P.E.T.S. for short. The creation of such a team also involves the review of processes and procedures that are in place and being followed. A review needed to assess the effectiveness and if appropriate for the works being performed. As part of these overall procedures the area of important focus of the P.E.T.S. group are those that focus on Project Management.

In approximately March 2011 Stantec was asked to provide an overview review of the current Project Management Manual (PMM) and associated systems in order to provide a Benchmark for comparative and improvement purposes. This initial Study concluded with a findings report submitted in August of 2011.

In October of 2013 Stantec was asked to provide a review of the current activities within the Nalcor P.E.T.S. Group and to observe and report on the improvements made on the 2011 report Recommendations. (These recommendations can be found in the August 2011 report, section 4.0, pg 4.1). In order to accomplish this review interview sessions were held on November 19 & 20, 2013 with three (3) Project managers to review active projects. Additionally a meeting was held with the two (2) Lead Schedulers to review the processes in place as it relates to Master Schedule generation and project plan reviews.

## 2.0 Reviews and PMI Survey Information

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### 2.1 PM REVIEW SESSIONS

During November 19 & 20, 2013 project reviews were conducted on three (3) selected P.E.T.S. Projects that were currently underway. The Projects review consisted of discussion with the Project Manager of each of 3 projects and topics were discussed that had focus on findings of the August 2011 PM Benchmarking Report recommendations and with an underlying focus to obtain necessary knowledge to complete the online Survey hosted by PMI.org on PM Benchmarking.

The three (3) Projects reviewed were selected based on the underlying criteria of that each was to be currently in progress and either of, multidiscipline with a seasoned Project manager, or newer Project Manager with a primarily single discipline team, or an intermediate long term project. These criteria were set to select projects that are applicable to the current processes and to gain insight of a broad range of knowledgebase of the Project Mangers in procedures compliance and also to find process improvement commonalities that are not project size or work experience biased.

Copies of the project review observations are included in Appendix "C".

### 2.2 PMI PM BENCHMARKING SURVEY

In the same fashion as done in 2011, In support of the Procedures review and the Projects review the Project Management Institute (PMI) has an online PM Benchmarking Survey available for PMI members to use to assess their company's relevant performance against the standard methodology as outlined in the Project Management Body of Knowledge. The reviewer as a PMI member has completed this survey on behalf of the Nalcor P.E.T.S. Group using the available information observed from time spent within the group and through these most recent review sessions. The report can be found in Appendix "A" along with a copy of the questions and descriptions on how they were responded. The additional information only available by online review has been captured here for reference only to better assist with understanding the report.



What can be observed from the completion of this survey is best done by comparison to the similar survey that was done in 2011, in particularly the 3 main focus areas of recommended improvement:

	2011	2013	UP +%
1. Project Risk Management	46%	80%	34%
2. Project Time Management	46%	86%	40%
3. Project Quality Management	33%	73%	40%

**Online PMI Benchmarking Survey Comparison results data**

KNOWLEDGE AREA	SURVEY DATE	SURVEY RESULTS	
Project Scope Management	8/16/2011	80%	<i>More about Knowledge Area</i> The processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. See Ch. 5 of The PMBOK® Guide
	11/25/2013	96%	
Project Human Resource Management	8/16/2011	65%	<i>More about Knowledge Area</i> The processes that organize, manage, and lead the project teams comprised of the people with assigned roles and responsibilities for completing the project. See Ch. 9 of The PMBOK® Guide.
	11/25/2013	70%	
Project Risk Management	8/16/2011	46%	<i>More about Knowledge Area</i> The processes of conducting risk management planning, identification, analysis, response, planning, and monitoring and control on a project. See Ch. 11 of The PMBOK® Guide
	11/25/2013	80%	
Project Communications Management	8/16/2011	80%	<i>More about Knowledge Area</i> Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide
	11/25/2013	80%	
Project Procurement Management	8/16/2011	85%	<i>More about Knowledge Area</i> The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.
	11/25/2013	85%	
Project Time Management	8/16/2011	46%	<i>More about Knowledge Area</i> Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.
	11/25/2013	86%	
Project Integration Management	8/16/2011	63%	<i>More about Knowledge Area</i> The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide
	11/25/2013	93%	
Project Cost Management	8/16/2011	100%	<i>More about Knowledge Area</i> The processes involved in estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide
	11/25/2013	93%	
Project Quality Management	8/16/2011	33%	<i>More about Knowledge Area</i> The processes and activities that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. See Ch. 8 of The PMBOK® Guide
	11/25/2013	73%	

## 3.0 Reviews

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### 3.1 PROJECT REVIEWS

Review meetings were conducted as follows:

Date: August 19 & 20, 2013

Location: Nalcor's Office, St. John's, NL.

Attendees: Alberta Marche, Craig T Power, Paul Dilion, Steven Drew, Tracy Doran, John Maclsaac, Keir Fiske (STN)

## 4.0 Recommendations

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The extent of this effort was to provide the P.E.T.S. Group where they have improved to as it relates to the previous recommendations. The details of these focus areas were as follows;

- Develop a policy and procedure that requires that a Project Specific Execution Plan (PEP) be developed for each and every project to a detail appropriate to the project. This plan would incorporate the existing Project Design Transmittals however would encompass the remaining methodology that the Project manager elects to do to manage the project as applicable such as. A sample detailed PEP Table of contents is included in Appendix "E" for reference.
- Develop a policy and procedure for the requirements to manage risks on projects. This would include an initial project risk review and an ongoing record of risks and mitigation plans recorded on a risk register. For further specific detail referring to PMBoK Chapter 11 would assist.
- Develop a policy and procedure for the requirements of overall Project Quality Management. This includes not only design quality but overall assurance the project procedures are being followed. This would be an expansion to the existing PMM Policy 08.01 and should be included in every PEP. For further specific detail referring to PMBoK Chapter 8 would assist.
- Schedule and project timeline planning should be improved on development. Regular progress monitoring is paramount to the project manager having the most current and up to date status of project tasks and impact of changes to sequence of activities. It is suggested that a guideline be added to the PMM that outlines the minimum level of schedule detail is developed for every project.

Overall each of these areas did see a noticeable improvement and that is reflective of the results of the findings in this report. As a result of this report there is only 1 key area of recommended focus.

- The processes the P.E.T.S. is following are very well developed and working well. It was found that there was not a formal Policy developed as part of the PMM or otherwise. It is recommended the current processes that have been developed be included in the PMM and thus documenting what is to be done on all projects.

## 5.0 Appendices

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Appendix A PMI Benchmarking Report 2013

Appendix B PMI Benchmarking Comparison 2011 versus 2013

Appendix C Interview Review Notes

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## **APPENDIX B**

**PMI Benchmarking Comparison 2013 vs 2015**

KNOWLEDGE AREA	SURVEY DATE	SURVEY RESULTS	
Project Risk Management	10/5/2015	 96%	<i>More about Knowledge Area</i> The processes of conducting risk management planning, identification, analysis, response planning, and monitoring and control on a project. See Ch. 11 of The PMBOK® Guide
	11/25/2013	 80%	
Project Procurement Management	10/5/2015	 90%	<i>More about Knowledge Area</i> The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.
	11/25/2013	 85%	
Project Communications Management	10/5/2015	 88%	<i>More about Knowledge Area</i> Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide
	11/25/2013	 80%	
Project Quality Management	10/5/2015	 80%	<i>More about Knowledge Area</i> The processes and activities that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. See Ch. 8 of The PMBOK® Guide
	11/25/2013	 73%	
Project Time Management	10/5/2015	 93%	<i>More about Knowledge Area</i> Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.
	11/25/2013	 86%	
Project Cost Management	10/5/2015	 100%	<i>More about Knowledge Area</i> The processes involved in estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide
	11/25/2013	 93%	
Project Integration Management	10/5/2015	 96%	<i>More about Knowledge Area</i> The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide
	11/25/2013	 93%	
Project Human Resource Management	10/5/2015	 85%	<i>More about Knowledge Area</i> The processes that organize, manage, and lead the project teams comprised of the people with assigned roles and responsibilities for completing the project. See Ch. 9 of The PMBOK® Guide.
	11/25/2013	 70%	
Project Scope Management	10/5/2015	 96%	<i>More about Knowledge Area</i> The processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. See Ch. 5 of The PMBOK® Guide
	11/25/2013	 96%	

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## **APPENDIX C**

**PMI Benchmarking Comparison 2011 vs 2015**



KNOWLEDGE AREA	SURVEY DATE	SURVEY RESULTS	
<b>Project Risk Management</b>	10/5/2015	96%	<i>More about Knowledge Area</i> The processes of conducting risk management planning, identification, analysis, response planning, and monitoring and control on a project. See Ch. 11 of The PMBOK® Guide
	8/16/2011	46%	
<b>Project Procurement Management</b>	10/5/2015	90%	<i>More about Knowledge Area</i> The processes necessary to purchase or acquire products, services, or results needed from outside the project team. See Ch. 12 of The PMBOK® Guide.
	8/16/2011	85%	
<b>Project Communications Management</b>	10/5/2015	88%	<i>More about Knowledge Area</i> Processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. See Ch. 10 of The PMBOK® Guide
	8/16/2011	80%	
<b>Project Quality Management</b>	10/5/2015	80%	<i>More about Knowledge Area</i> The processes and activities that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. See Ch. 8 of The PMBOK® Guide
	8/16/2011	33%	
<b>Project Time Management</b>	10/5/2015	93%	<i>More about Knowledge Area</i> Includes the processes required to manage timely completion of the project. See Ch. 6 of The PMBOK® Guide.
	8/16/2011	46%	
<b>Project Cost Management</b>	10/5/2015	100%	<i>More about Knowledge Area</i> The processes involved in estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. See Ch. 7 of The PMBOK® Guide
	8/16/2011	100%	
<b>Project Integration Management</b>	10/5/2015	96%	<i>More about Knowledge Area</i> The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. See Ch. 4 of The PMBOK® Guide
	8/16/2011	63%	
<b>Project Human Resource Management</b>	10/5/2015	85%	<i>More about Knowledge Area</i> The processes that organize, manage, and lead the project teams comprised of the people with assigned roles and responsibilities for completing the project. See Ch. 9 of The PMBOK® Guide.
	8/16/2011	65%	
<b>Project Scope Management</b>	10/5/2015	96%	<i>More about Knowledge Area</i> The processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. See Ch. 5 of The PMBOK® Guide
	8/16/2011	80%	



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PM STANDARDS  
BENCHMARKING REPORT

# APPENDIX D

## Interview Review Summary Notes

## **2015 PM Benchmarking review**

### **Summary points of Interview findings.**

**Overview:** This summary is to provide a short finding report following the PM interviews that were conducted on September 22, 2015. Focus is on the improvements noted against the 2013 PM benchmarking recommendations. At the time of this summary the PMM Procedures are still being reviewed and the PMI Standards Benchmarking Survey has not been completed. A draft report is scheduled to be submitted by October 9, 2015.

**1) Develop a Policy and Procedure that requires a Project Execution Procedure (PEP) for every project.**

- PMM Policy 3.2.1 identifies that all projects are required to have a Project Scope Statement Approved prior to commencement.
- PMM Policy 3.2.11 identifies the requirements of a Project Scope Statement.
- Review of ongoing projects there were paper versions of detailed Project Scope Statements and on more recent projects the online version of the Project Scope Statement was being used. All reviewed projects had detailed Project Scope Statements in place.
- The detailed Project Scope Statements, PMM policies and process in place are the backbone pieced of a Project Execution Plan.

**2) Develop a Policy and Procedure for the requirement to manage risks on projects.**

- PMM Policy 3.2.22 identifies the requirements for Planning Risk Management and prescribes a formal process for large and complex projects as well as outlines an informal process for standard and regularly completed projects.
- PMM Policy 3.4.6 identifies the requirements for Monitoring Risk.
- Review of the larger projects showed the formal process being followed and risk registers completed and monitored.
- On a couple smaller projects reviewed it does appear that the informal process was not being used for capturing the project risks as the review indicated the risks were captured as part of weekly meeting minutes.
- In all cases the Project Risks identified are carried forward as part of the regular “Risks & Solves” project reviews

**3) Develop a Policy and Procedure for the requirement of overall Project Quality Management.**

- PMM Policy 3.2.21 The Planning of Quality identifies the requirements of Product Quality planning.
- PMM Policy 3.3.4 is titled as Executing Quality; however the version of the PMM under review does not contain any body text so unable to review.
- PMM Policy 3.4.5 Monitoring and Controlling Quality identifies the requirements to maintain the product quality plan.
- At this point a PMM Policy to outline the requirement to assuring that the PMM and identified project procedures has not been located. PMM continues to be further reviewed.

**4) Schedule and Project Timeline Planning Should be improved on development**

- Notable improvement on the level of planning was apparent on all projects reviewed.
- As part of the Project Scope Statement all projects require that a schedule plan be fully in place prior to approval.
- PMM Policy 3.4.4 Monitoring and Controlling Project Schedules has not been improved on as yet in the PMM from 2013 however it is noted that these portions of the PMM are under redevelopment and were not available at this time of review.

**5) Development of PMM Policies and Procedures.**

- The PMM has undergone a full overview and update, is currently in final Nalcor review for 2015 implementation.
- Noted new sections for Risk, Quality and Change management.
- Scheduling updates are still to be incorporated into the PMM.

**6) Change Management improvements (Requested to add this to the reviews, addition to the recommendations from 2013 report)**

- PMM Policy 3.4.7 has been added to the PMM. Details the requirements for the Management of Change on all Projects.
- Is inclusive within the new Project Scope Statement process.
- Reviewed PCNs and contract changes on projects reviewed and the processes appear to be being followed consistently.
- This area (Change Management) has improved notably from the previous reviews.