

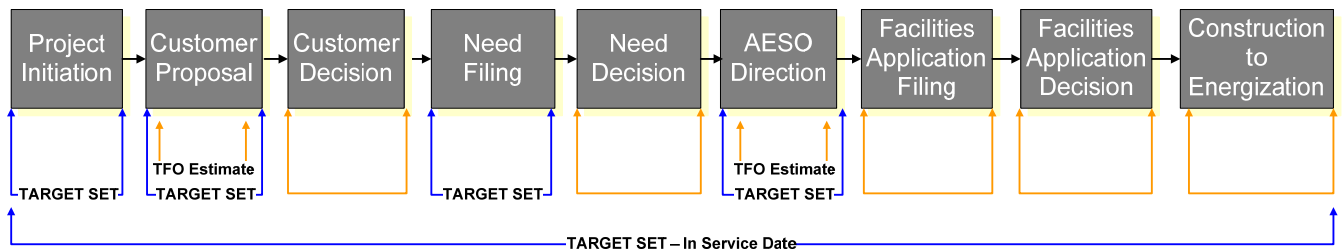


**CUSTOMER INTERCONNECTION PROCESS
PERFORMANCE REPORT
JANUARY 1 – JUNE 30, 2008 REPORTING PERIOD**

Date Issued: October 8, 2008

1. Introduction

In April 2008 the AESO implemented a performance framework for the customer interconnection process. The intent of the performance framework is to provide stakeholders duration times on each phase of the process, including target in-service date, as set out in the diagram below.



The blue arrows identify phases where targets have been established and the AESO tracks and reports against the targets. The orange arrows identify phases where the AESO tracks durations only; targets have not been set for these phases.

The performance framework was established with input from Stakeholders during January to March and implemented in April 2008. The discussion paper, stakeholder comments and the final paper can be found by clicking on [Performance Targets](#).

This report is the AESO's first performance report and includes information on projects that completed a performance phase during the period January 1, 2008 and June 30, 2008 (referred to as the current reporting period throughout this document). The AESO intends to provide performance reporting to stakeholders on a semi-annual basis.

The remainder of this performance report includes:

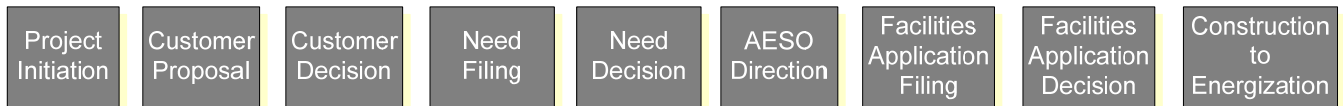
- Section 2 Recent process changes
- Section 3 General statistics on the Customer Interconnection Process
- Section 4 Summary of performance results
- Appendix A Interpretation Information
- Appendix B Existing Substation Process (Type 1 projects) – Detailed Graphs
- Appendix C New Substation Process (Type 2 projects) – Detailed Graphs
- Appendix D Industrial Load, Generator, ISD Process (Type 3 projects) – Detailed Graphs
- Appendix E Durations associated with receipt of TFO Cost Estimates

Prior to reading this report stakeholders are encouraged to review Appendix A – Interpretation Information, which provides definitions on the phases and other terms used throughout the document as well as information on how to interpret the graphs.

2. Recent Process Changes

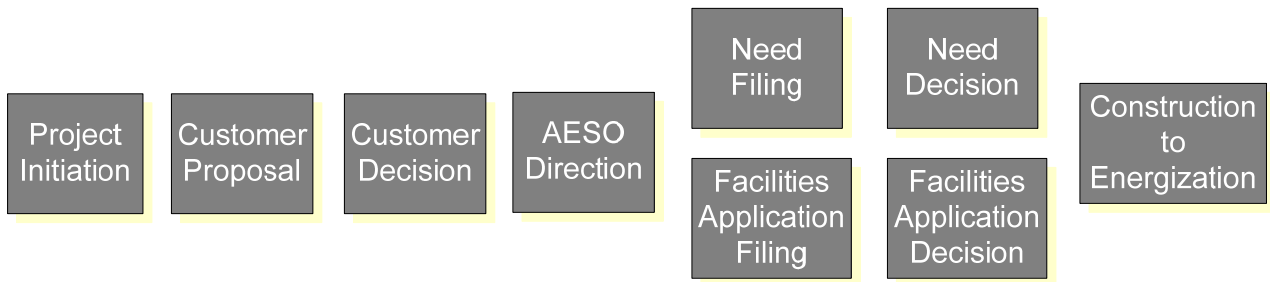
The AESO will be implementing some changes to the performance management framework in view of some recent changes in the interconnection process that involve combined Need and Facilities Application filings. These changes will be reflected in future performance reports.

The Performance Framework was established based on the customer interconnection process in place at that time as outlined in the diagram below.



This process allows for sequential occurrence of activities whereby the AESO files a NID and Commission reviews and renders a decision on the NID. Following this, the AESO directs the TFO to file a Facilities Application for Commission approval and because the activities are performed sequentially both the AESO and the TFO perform their own public notification to support the individual filings.

A provision of Section 15(4) of the Hydro and Electric Energy Act enables the Commission to review the Need Filing and the Facilities Application in a combined manner. The AESO, with agreement from the TFO and in consultation with the Customer, may for certain projects, request the Commission to consider an application in a combined manner. This approach will change the sequencing of a project as follows:



The combined approach introduces opportunities for efficiency gains; firstly due to one regulatory process rather than two, and secondly because the AESO and the Transmission Facility Owners (TFO) can take an integrated approach with regard to public notification and involvement.

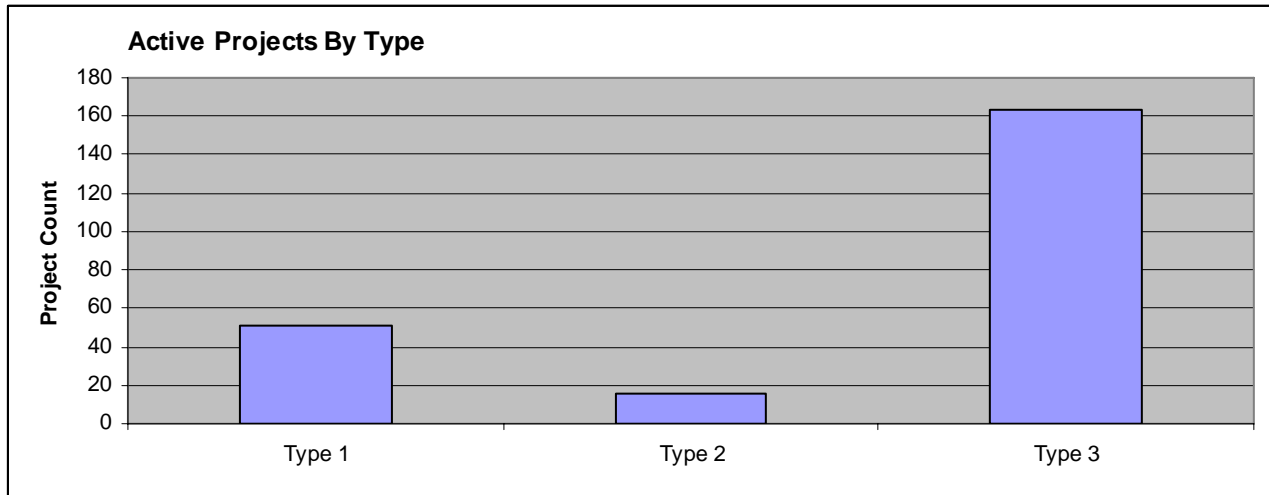
The AESO and TFOs have started to use and will continue to use the combined filing approach for most customer interconnection projects. For this reporting period performance information associated with combined filings has been included in the first three phases (Project Initiation, Customer Proposal and Customer Decision) and excluded from the remaining phases.

3. General Statistics on the Customer Interconnection Process

This section provides general statistics on the customer interconnection process which may be useful to stakeholders when reviewing the performance target results.

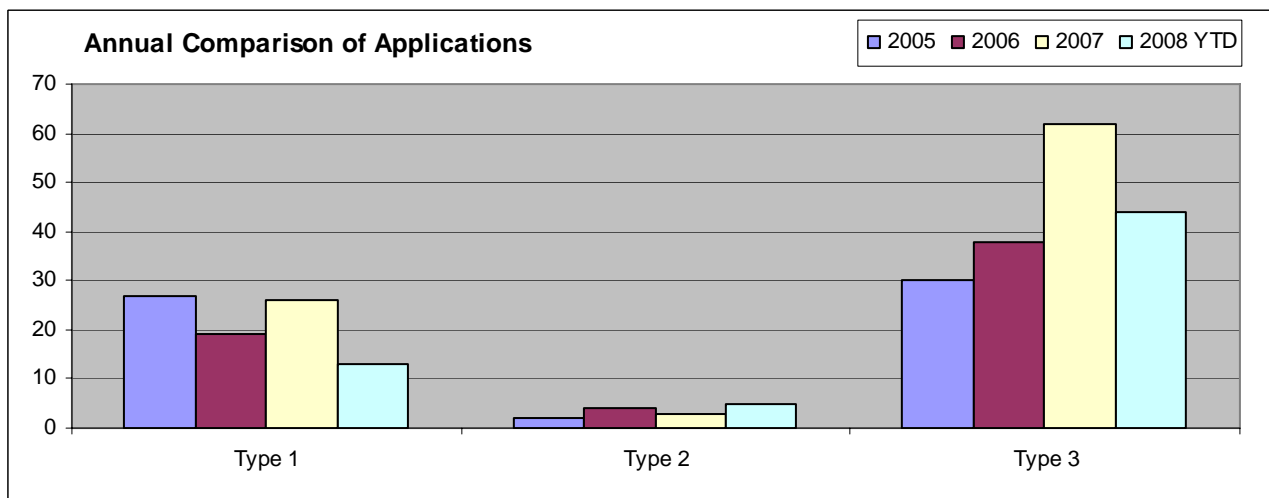
3.1 Active Customer Projects

There are currently 230 active customer projects¹ and the graph below presents a breakdown by project type. Type 3 projects account for the majority of the volume.



3.2 Customer Interconnection Applications

The number of customer interconnection applications continues to increase from prior years with the largest increase occurring with Type 3 projects as indicated in the graph below.



The number of projects energized or forecast to be energized, as the case may be, also continues to increase; again with the largest increase occurring with Type 3 projects.

¹ Active projects do not include projects which have been cancelled or placed on hold by the Customer.

4. Summary of the Results

This section provides a summary on the performance target phases, the number of projects completing each phase, average phase durations and average project cycle time durations.

4.1 Summary of Results for Performance Target Phases

The graph in Section 4.3 below provides a performance summary for the phases where targets were established. In some phases the AESO met the target 100% of the time and in other phases performance was below target. Section 4.2 provides some interpretation regarding the phases with lower performance and to obtain a more complete understanding of the results stakeholders are encouraged to review the detailed performance graphs found in Appendices B through D.

The AESO has initiated action to improve performance results however these actions are expected to have a longer term impact rather than immediate results.

Firstly, the AESO has commenced an initiative to review the process and identify opportunities for change. Throughout the summer many customer interviews were conducted and the information gathered from the interviews will be used as the basis for initiating change through the latter part of 2008 and throughout 2009.

Secondly, the AESO acknowledges that increased project activity levels in Alberta are impacting performance results and has subsequently secured additional consulting resources to assist with the work on interconnections.

And finally, the AESO is completing system reinforcement plans for congested areas and this will positively impact future performance results. In some instances customer projects cannot be advanced through the process until the system reinforcement plans are complete and this has resulted in project delays and longer cycle times.

Specific performance regarding “In-Service Dates” has not been included in this Performance Report as most of the projects commissioned so far this year were initiated prior to the AESO and industry having established business practices for setting planned in-service dates for reporting purposes. AESO continues to work with TFOs and Customers to establish business practices for establishing the planned in-service dates. The AESO acknowledges this is of the utmost importance to customers and is committed to collaborating closely with the TFOs, Customers, and the Commission to meet the Customer’s in-service date. Future reports will provide more information regarding in-service date performance

4.2 Additional Interpretation

This section provides information and interpretation on the phases with lower performance results.

Project Initiation Phase – Type 3 Projects

The target for the Project Initiation phase is 14 days and the average performance achieved as indicated in the detailed graph in Appendix D was 16 days; approximately 50% of the projects were delivered below target and 50% were delivered above the target. The high volume of Type 3 projects contributed to some longer turnaround times for this phase.

Customer Proposal Phase

The targets for the Customer Proposal phase are 60 days for Type 1 projects, 180 days for Type 2 projects and 120 days for Type 3 projects.



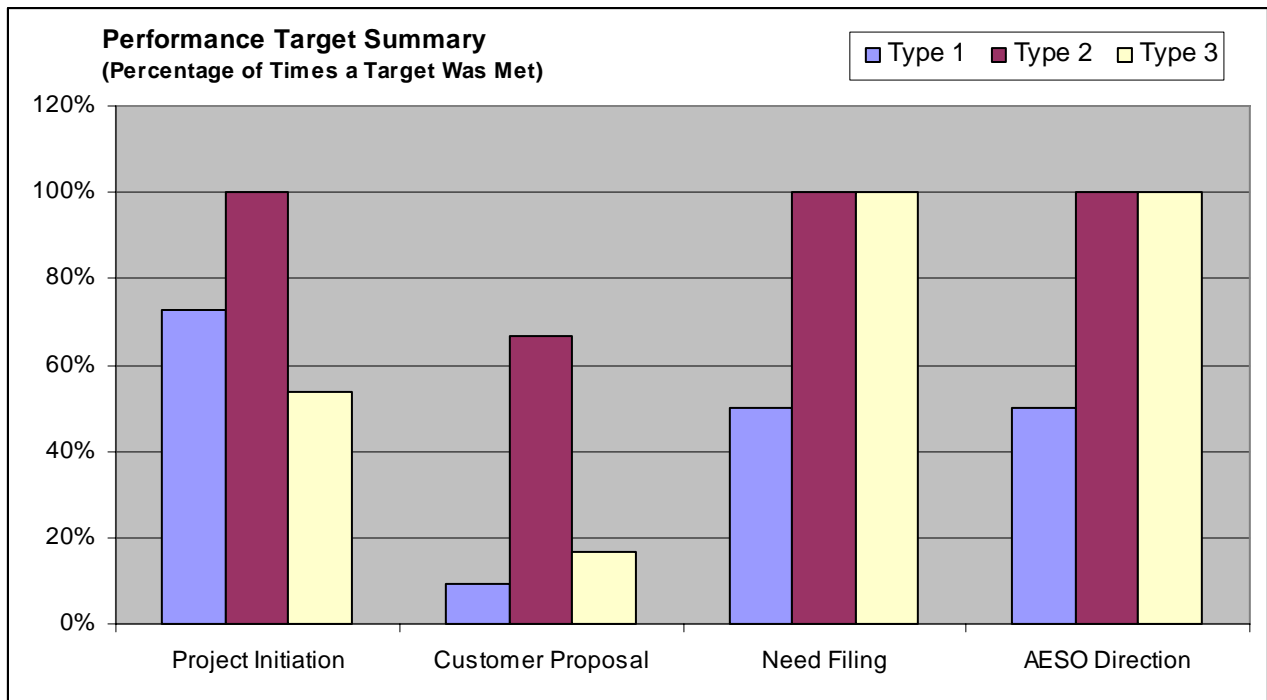
The average performance for Type 1 projects was 137 days for delivering a proposal with one project in particular causing a significant increase to the average. As for Type 3 projects, the time taken to deliver a proposal exceeded the target 120 days. Key factors behind the lengthy cycle times include project volumes, resource capacities and delays due to dependencies on system projects.

AESO Direction Phase – Type 1 Projects

The target for AESO Direction for Type 1 projects is 60 days. 50% of the projects were delivered below the target and 50% were delivered above the target; the average delivery time was 86 days. Refer to Appendix B to review the detailed performance graphs.

4.3 Performance Summary

The graph below presents a summary of performance results on phases where targets were set.

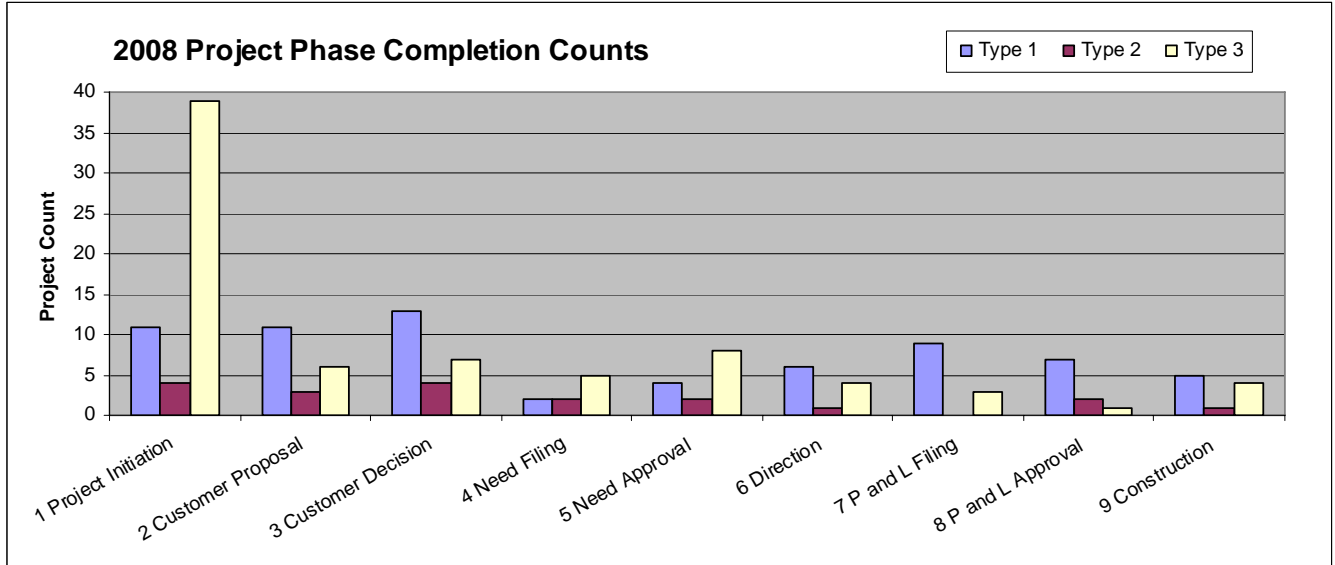


More detailed performance information can be found in Appendices B through E:

- Appendix B provides detailed graphs for Type 1 projects including averages against targets.
- Appendix C provides detailed graphs for Type 2 projects including averages against targets.
- Appendix D provides detailed graphs for Type 3 projects including averages against targets.
- Appendix E provides graphs regarding durations for TFO cost estimates.

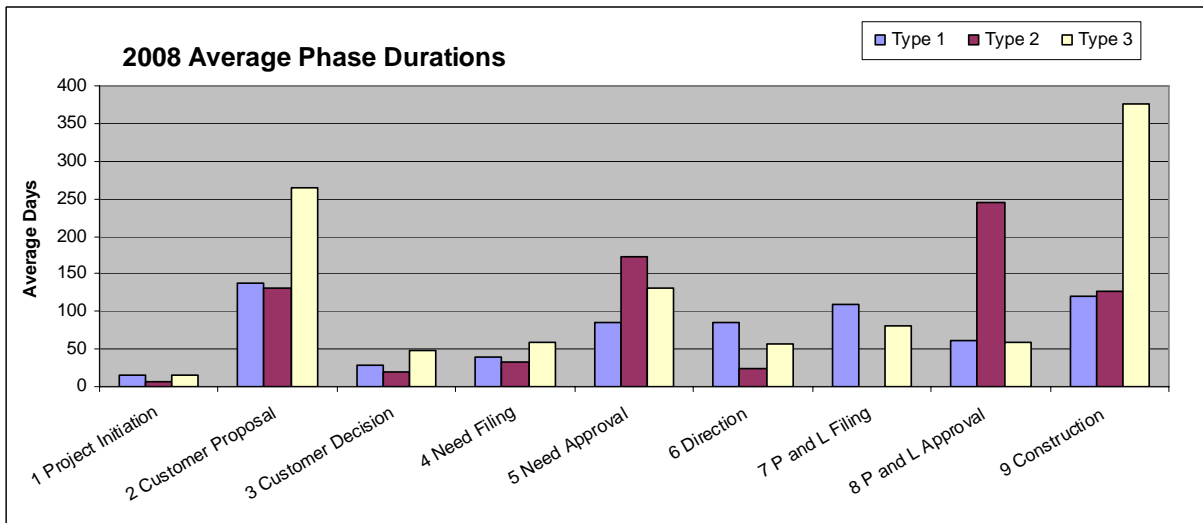
4.4 Projects Completing Phases

The graph below presents the number of projects that completed a phase in the current reporting period.



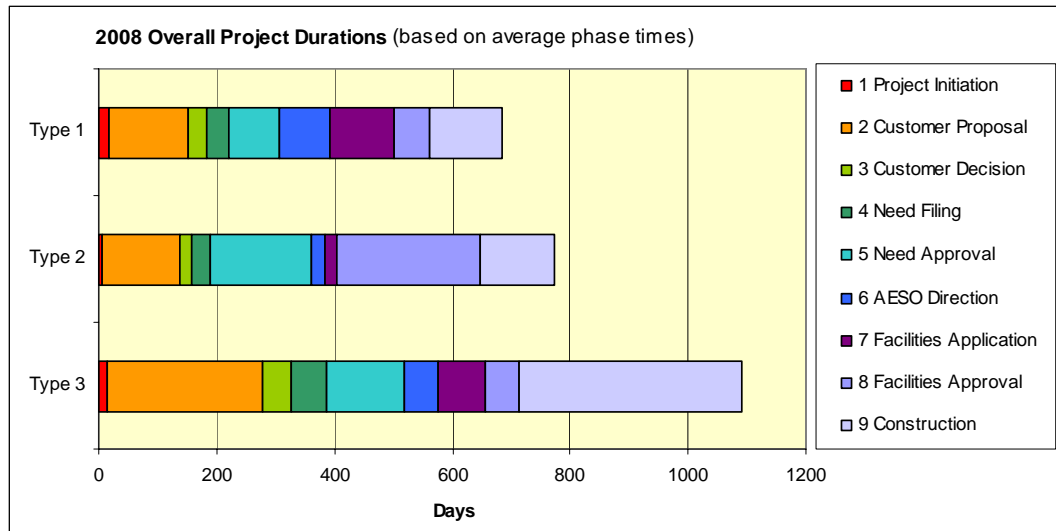
4.5 Average Phase Durations

The graph below presents average duration times based on projects that completed a phase during the current reporting period. In some cases either very few or no projects may have completed a particular phase and in these cases the average duration of the phase may not be a good indicator of actual phase durations.



4.6 Average Project Cycle Time Durations

Based on the 2008 average duration times, average overall project cycle times have been estimated and illustrated in the graph below. Please note that this graph does not represent actual cycle times, only duration times based on averages.



Notes:

1. Stakeholders should note that the volume of Type 2 projects is low and the results presented above may not provide a realistic indicator of average project cycle times. In addition, Between January 1 and June 30, 2008 no Type 2 projects completed the Facilities Application Filing phase; this activity occurred in 2007 for projects that completed construction in the first half of 2008. To complete the graph above, the 2007 average was used for the Type 2 Facilities Application Filing phase.
2. An important activity in the project cycle is Participant Involvement. Prior to filing a Need Application or a Facilities Application the AESO and TFOs are required to fulfill the Participant Involvement Program requirements of the Commission rules. Refer to the Commission's [Rule 007](#) for additional information on the program. Cycle times associated with the Need Filing and Facilities Application Filing phases could increase as public notification expectations increase. The AESO, in conjunction with TFOs, is implementing a combined filing practice which enables a more integrated approach with regard to the Participant Involvement Program and this practice may help offset potential cycle time increases resulting from the program.
3. Type 3 project durations can vary significantly depending on the nature, scale or complexity of the project. These projects range from generator (eg. coal, gas or wind) to load (eg. pipeline pumping, oil sands upgraders, oil sands, etc) interconnections of various sizes.



5. Appendices



Appendix A – Interpretation Information

Purpose

Within Appendix A stakeholders will find information on acronyms, terms, and definitions used in the performance metrics reports as well as instructions on how to interpret the performance metric graphs within the performance reports.

Acronyms

Following is a list of acronyms used within the AESO's Performance Metric reports:

AESO	Alberta Electric System Operator
Commission	Alberta Utilities Commission
DFO	Distribution Facility Owner
NID	Needs identification document
TFO	Transmission Facility Owner

Terms

Following is a list of terms used within the AESO's Performance Metric reports:

Type 1 – Refers to Existing Substation projects. Existing substation projects are generally smaller in scale and less complex in nature than other projects. Typically the projects involve the addition of transformers or breakers within an existing substation.

Type 2 - Refers to New DFO Substation projects. New DFO substation projects can be significantly more complex than Type 1 projects and typically involves the construction of a new substation and associated transmission lines to serve distribution loads.

Type 3 – Refers to Industrial Load, Generator, and ISD projects involving a single end use customer. ISD refers to parties with or seeking an industrial system designation.

Phase Definitions

Following are definitions for the phases referred to in the Performance Reports.

Project Initiation: This phase begins when a Customer Interconnection application is received, and ends when the application has been acknowledged by the AESO.

Customer Proposal: This phase begins when a Customer Interconnection application has been acknowledged, and ends when the AESO delivers a Customer Proposal to the Customer.

Customer Decision: This phase begins when a Customer Proposal is delivered to the Customer, and ends when the Customer informs the AESO that the proposal has been accepted and the project can continue.

Need Filing: This phase begins when the AESO receives the Customer's acceptance of the Customer Proposal, and ends when the NID is filed with the Commission. Note: This phase does not include projects where the NID filing and the Facilities Application filing will be filed with the Commission in a combined manner.

Need Approval: This phase begins when the NID is filed with the Commission, and ends when the Commission renders a decision on the NID. Note: This phase does not include projects



where the NID filing and the Facilities Application filing will be filed with the Commission in a combined manner.

AESO Direction: This phase begins when the Commission renders a decision on the NID (assumes the NID is approved), and ends when the AESO directs the TFO to file a facilities application with the Commission. This phase does not include projects where the NID filing and the Facilities Application filing will be filed with the Commission in a combined manner.

Facilities Application: This phase begins when the AESO directs the TFO to file a facilities application with the Commission, and ends when the facilities application is filed with the Commission. This phase does not include projects where the NID filing and the Facilities Application filing will be filed with the Commission in a combined manner.

Facilities Approval: This phase begins when the Commission receives a facilities application from the TFO, and ends when the Commission renders a decision on the facilities application and issues a permit and license to build the facilities. This phase does not include projects where the NID filing and the Facilities Application filing will be filed with the Commission in a combined manner.

Construction: This phase begins when the Commission issues a permit and license to build the facilities, and ends when the project is energized.

In-Service Date Performance Measure

The in-service date performance measure represents the time from receipt of the customer application through to the mutually agreed upon date by the Customer, TFO, and AESO in regards to the in-service, or energization, of the interconnection facilities. The mutually agreed upon date (target in-service date) may vary over the project cycle depending on project changing circumstances with the initial target in-service date being established at the end of the Need filing phase.

TFO Cost Estimates

The AESO is dependant on TFO cost estimates when completing two phases:

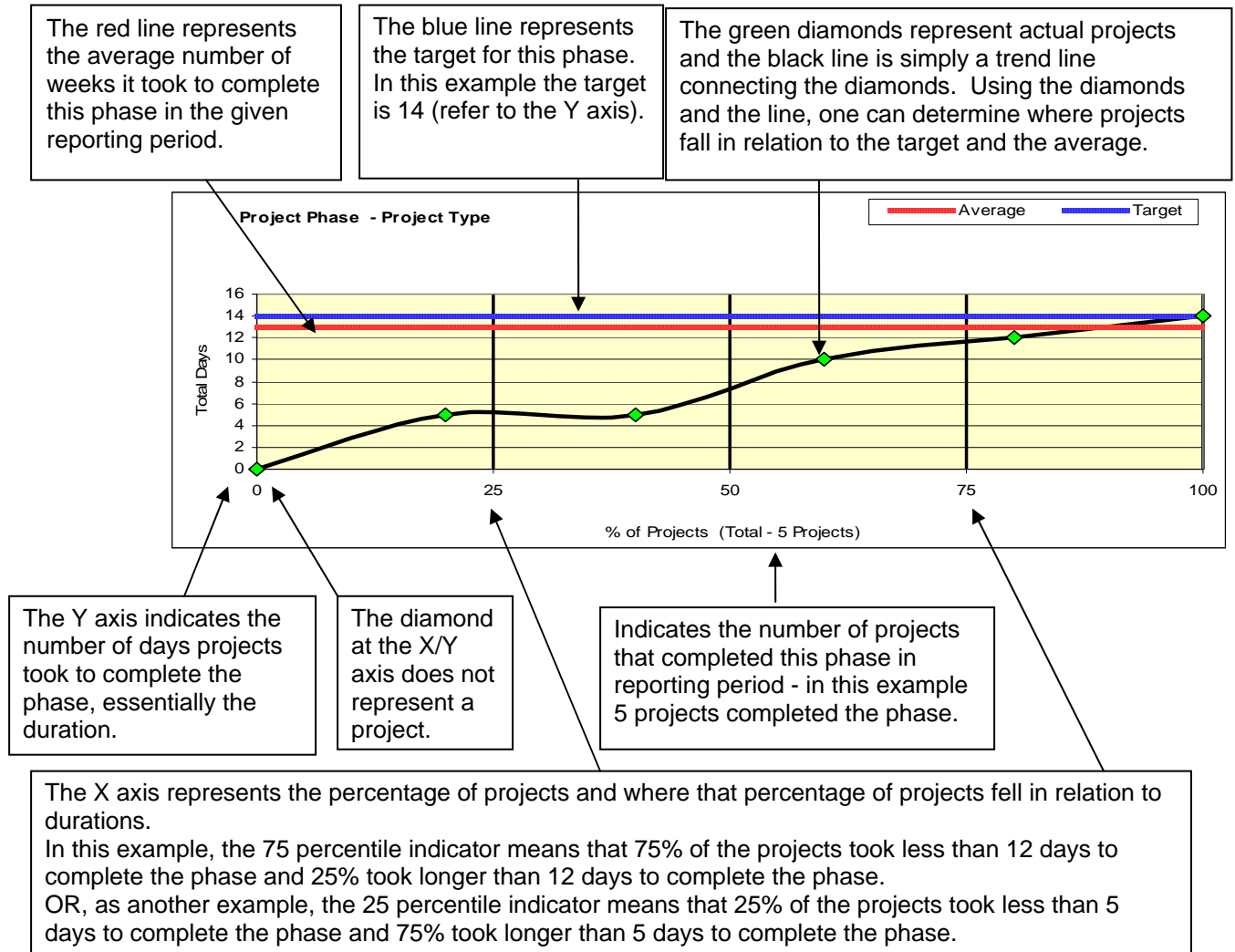
- +/- 30% cost estimates during the Customer Proposal phase
- +20/-10% cost estimates during the Need Filing phase

The AESO tracks and reports on aggregated average duration times for all TFOs for each estimate type and for each process type². Duration time is defined as the time between the AESO's request for the estimate to receipt of the estimate from the TFO.

² +/-30% estimates for existing substation projects are not tracked and therefore will not be reported. The AESO does not request this level of estimates for existing substation projects as TFOs provide this information in the Interconnection Proposal.

Interpretation for the Graphs

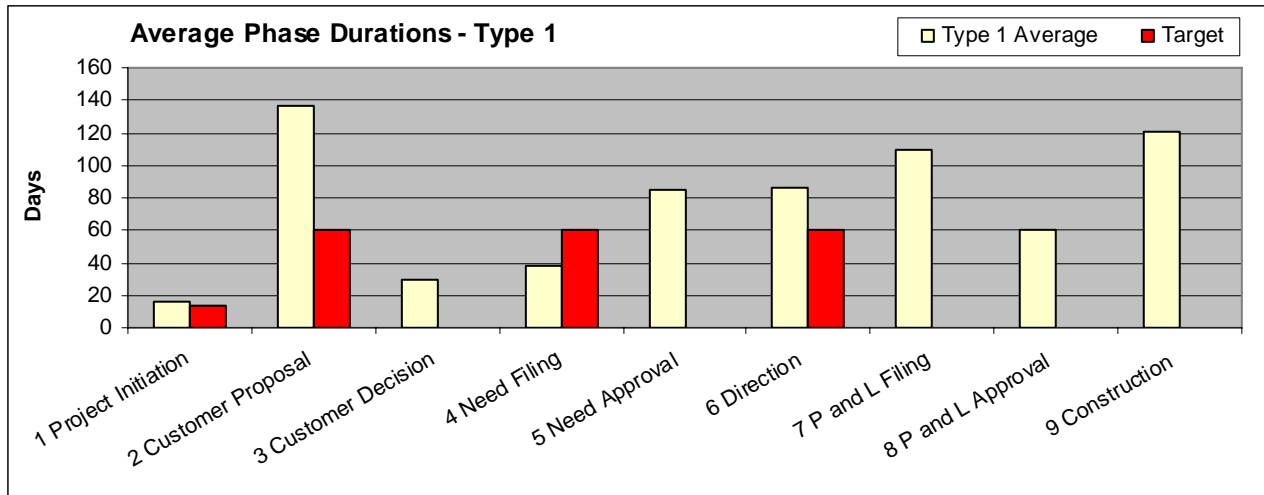
The graph below is intended to assist readers interpret the graphs presented in Appendices B, C and D. The information in the graph below is not based on actual data; the data has been created solely for illustrative purposes. Please note that this graph shows a target line which may or may not be included in all graphs within Appendices B through D.



Appendix B – Graphs for Type 1 Projects

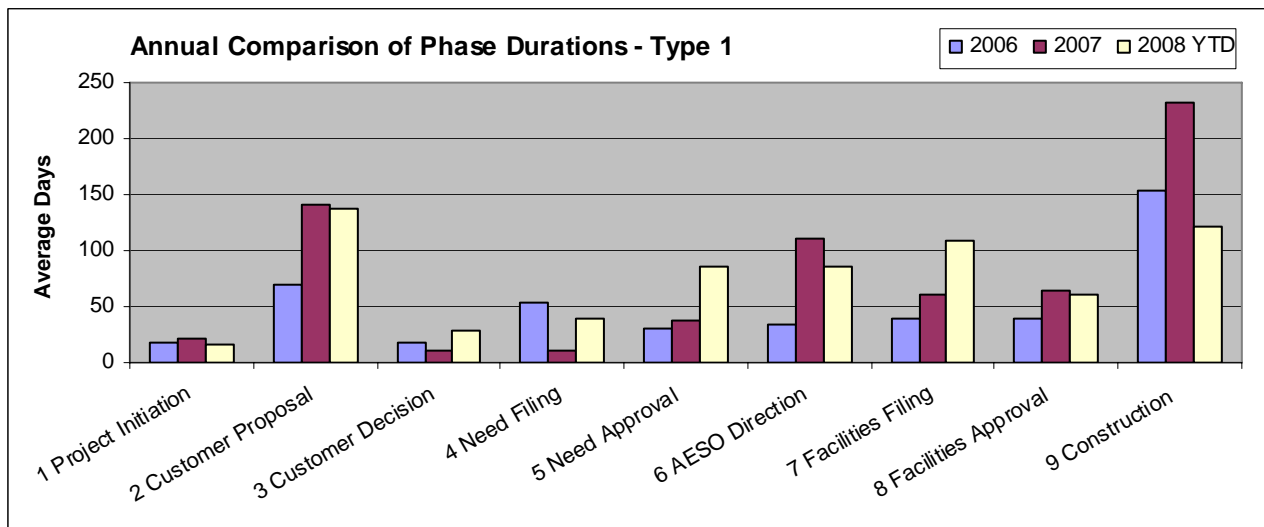
Phase Durations for the Current Reporting Period

The following graph shows the average phase durations for Type 1 projects including targets if a target was established for the specific phase.



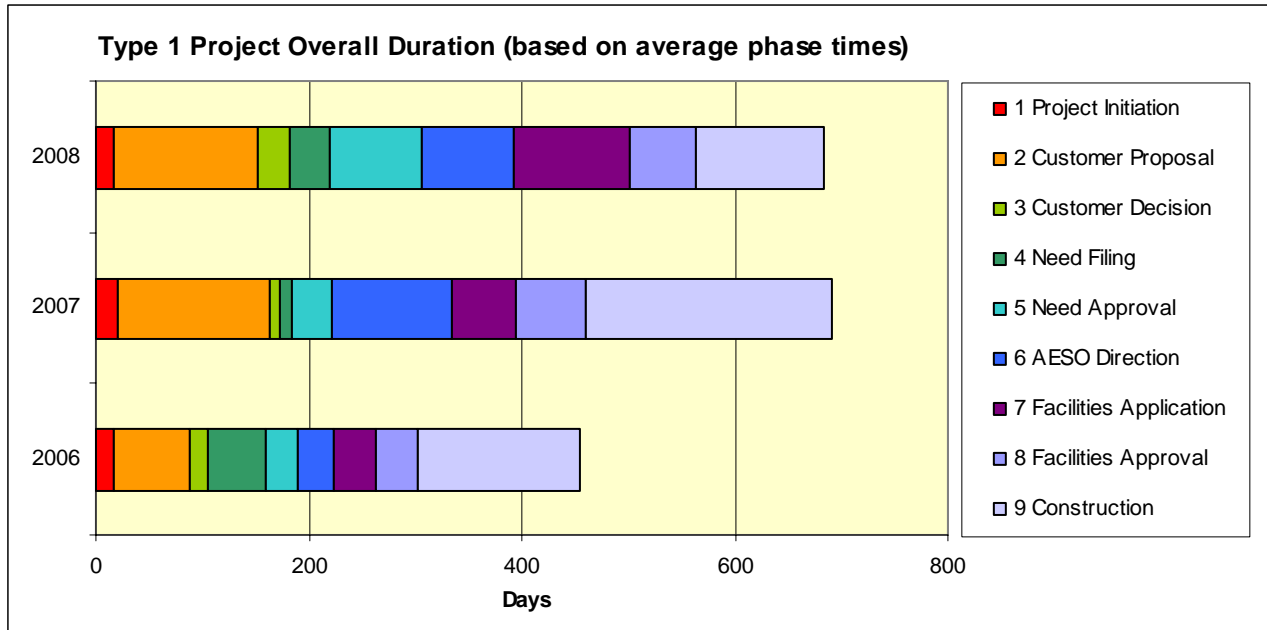
Phase Durations for 2006, 2007 and 2008

The following graph shows the comparison of average phase durations for Type 1 projects for the current reporting period to those of previous years.

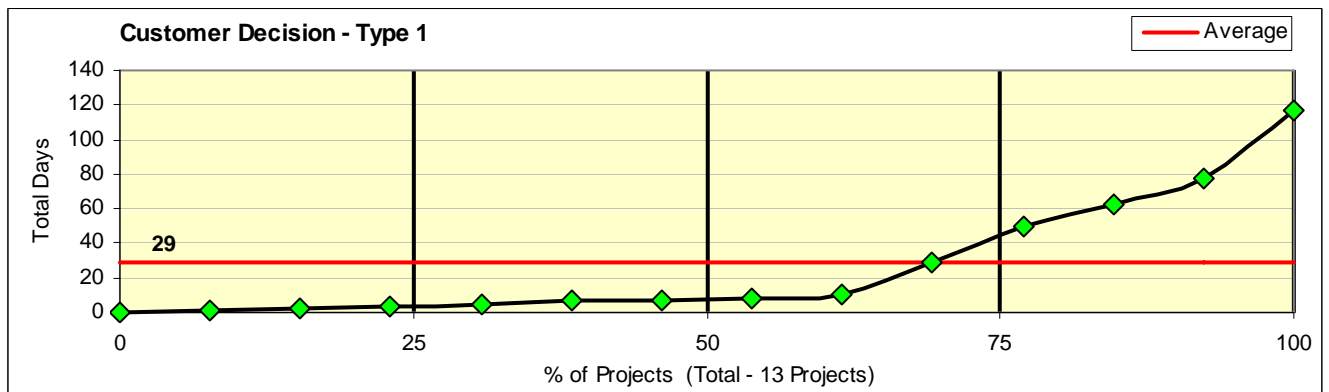
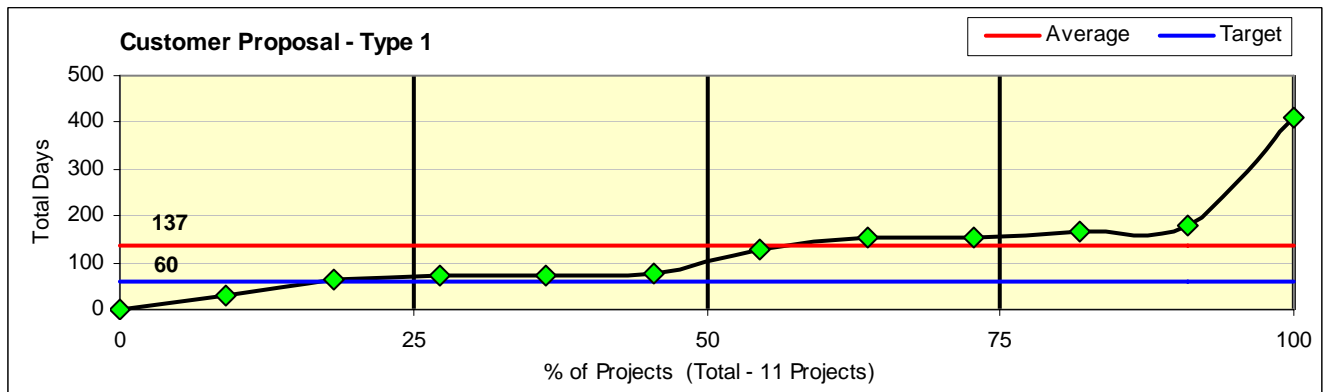
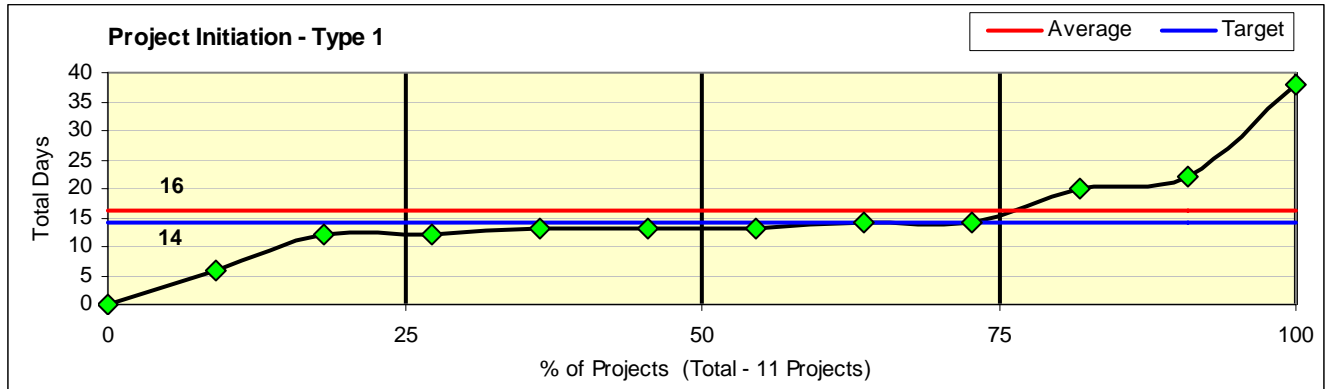


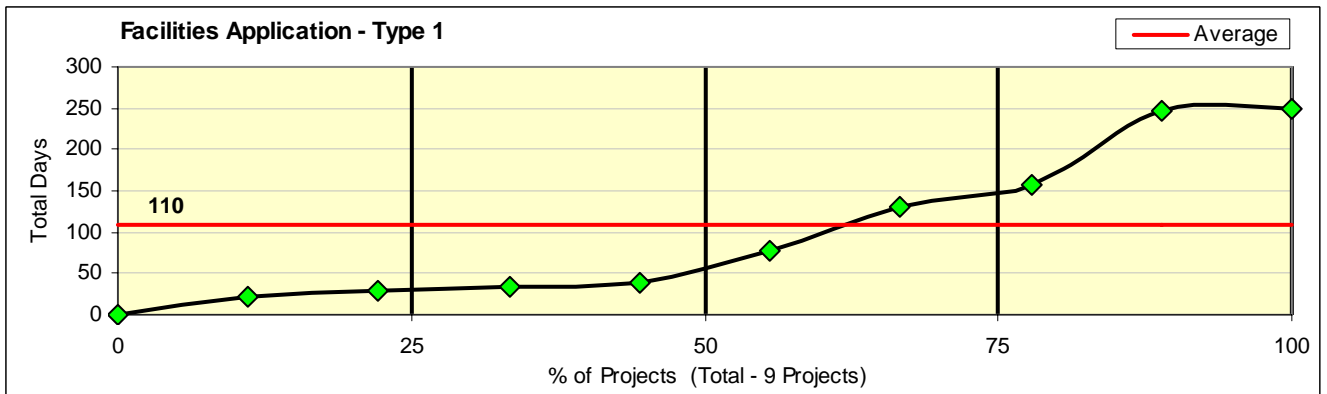
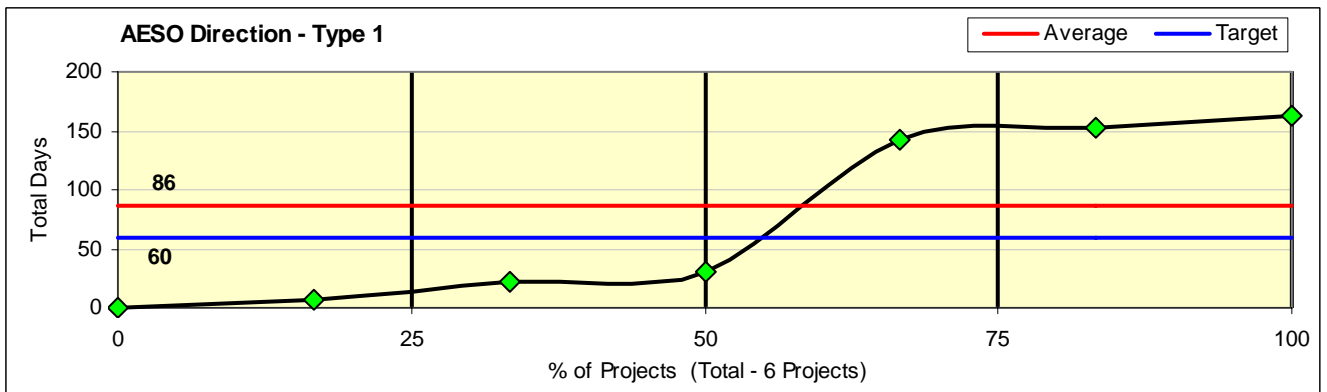
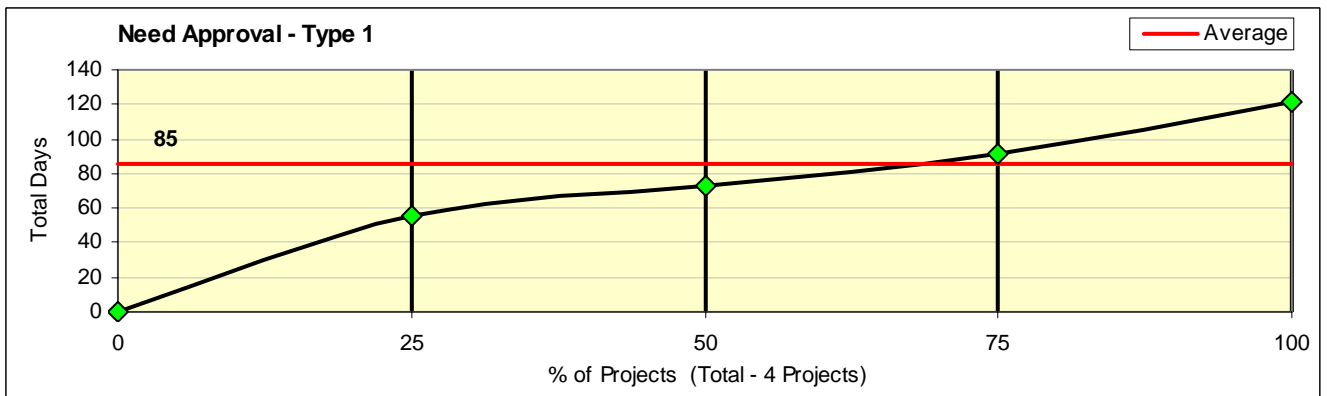
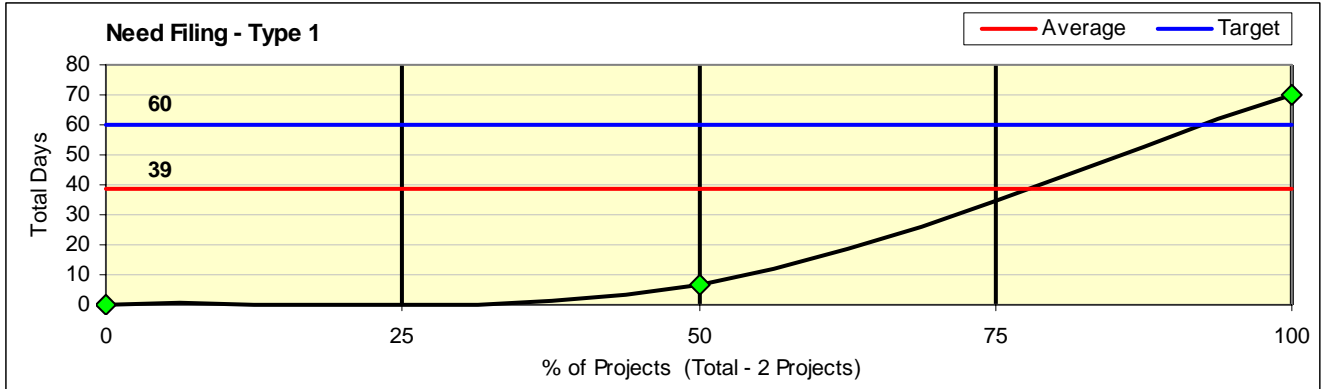
Average Project Cycle Times for 2006, 2007 and 2008

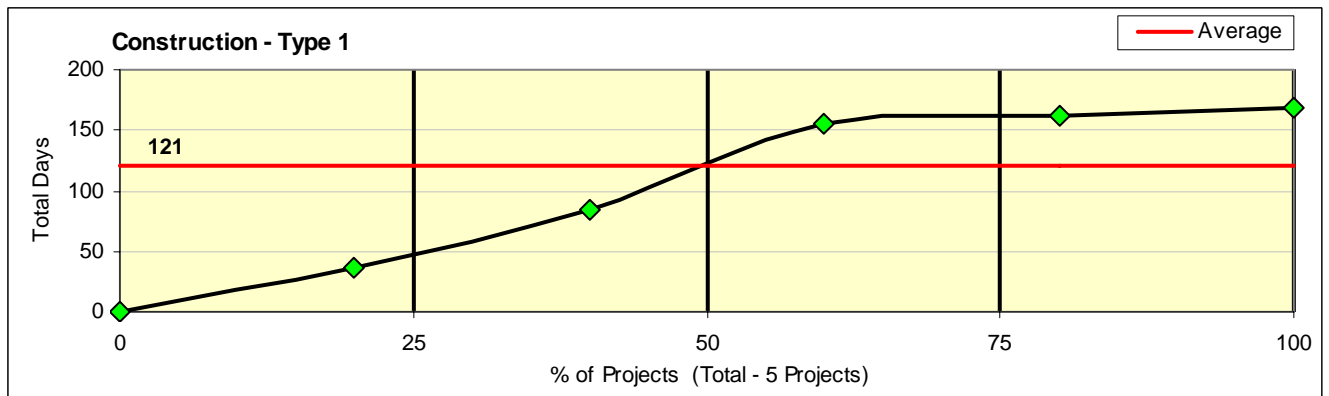
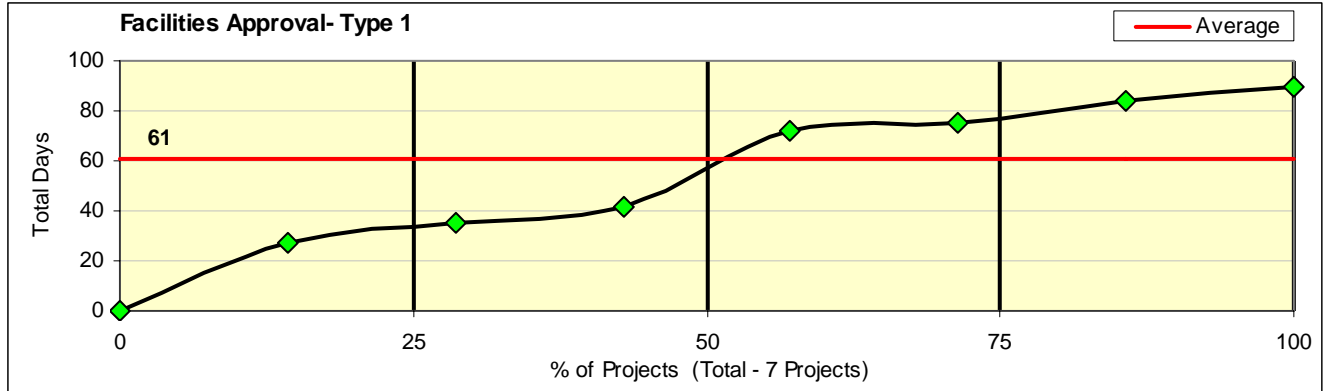
The following graph compares average overall cycle times for 2006, 2007 and 2008. Please note that this graph does not represent actual cycle times, only duration times based on averages.



Results for Each Phase for Type 1 Projects





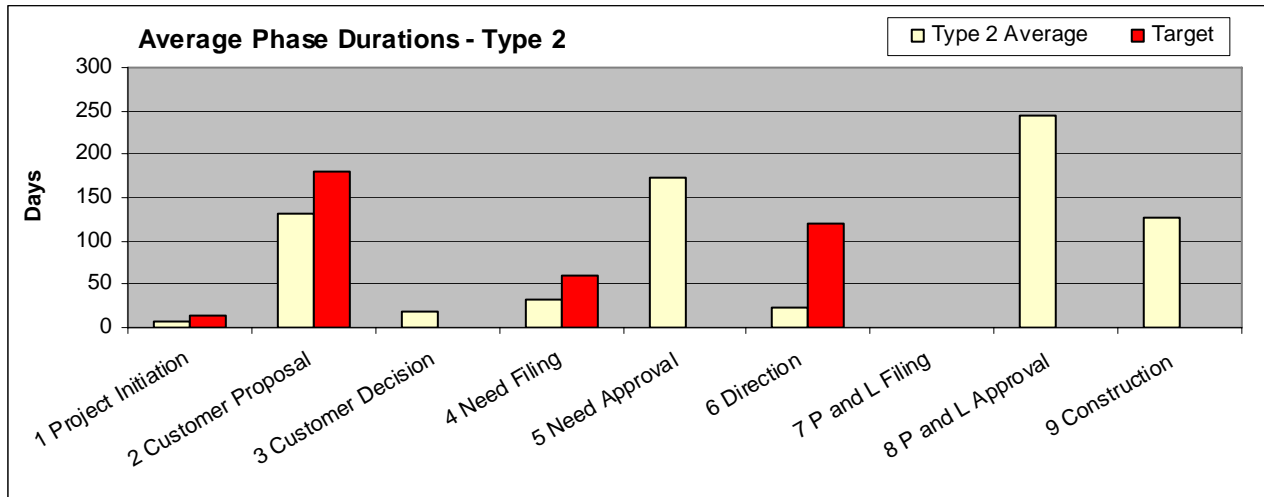


Appendix C – Graphs for Type 2 Projects

When reading this section, stakeholders should note that the number of number of Type 2 projects reported on is small and for this reason the information presented may not provide representative indicators.

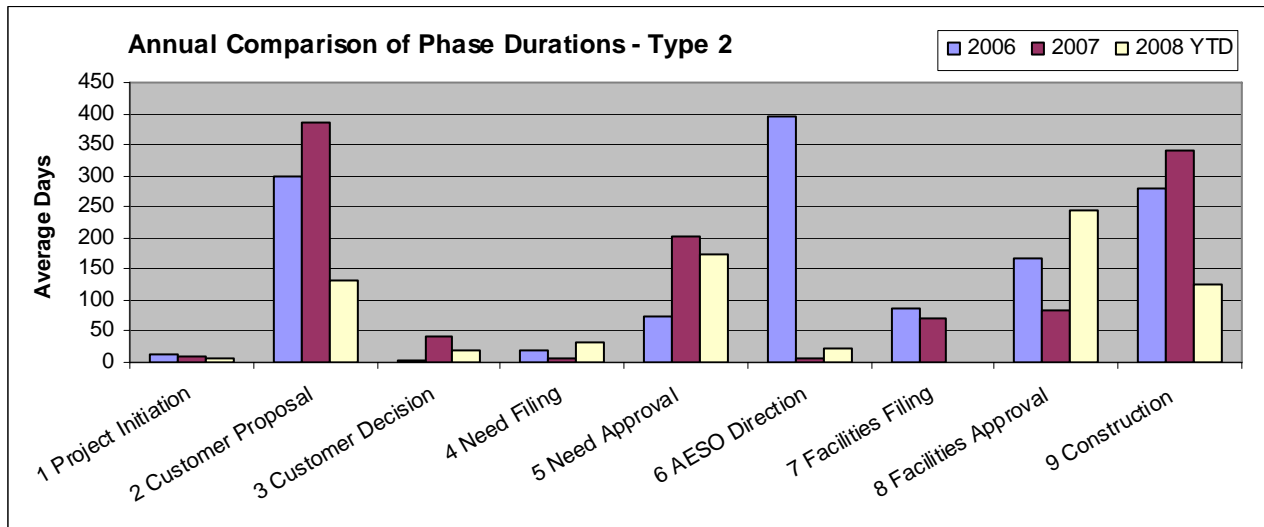
Phase Durations for the Current Reporting Period

The following graph shows the average phase durations for Type 2 projects including targets if a target was established for the specific phase.



Phase Durations for 2006, 2007 and 2008

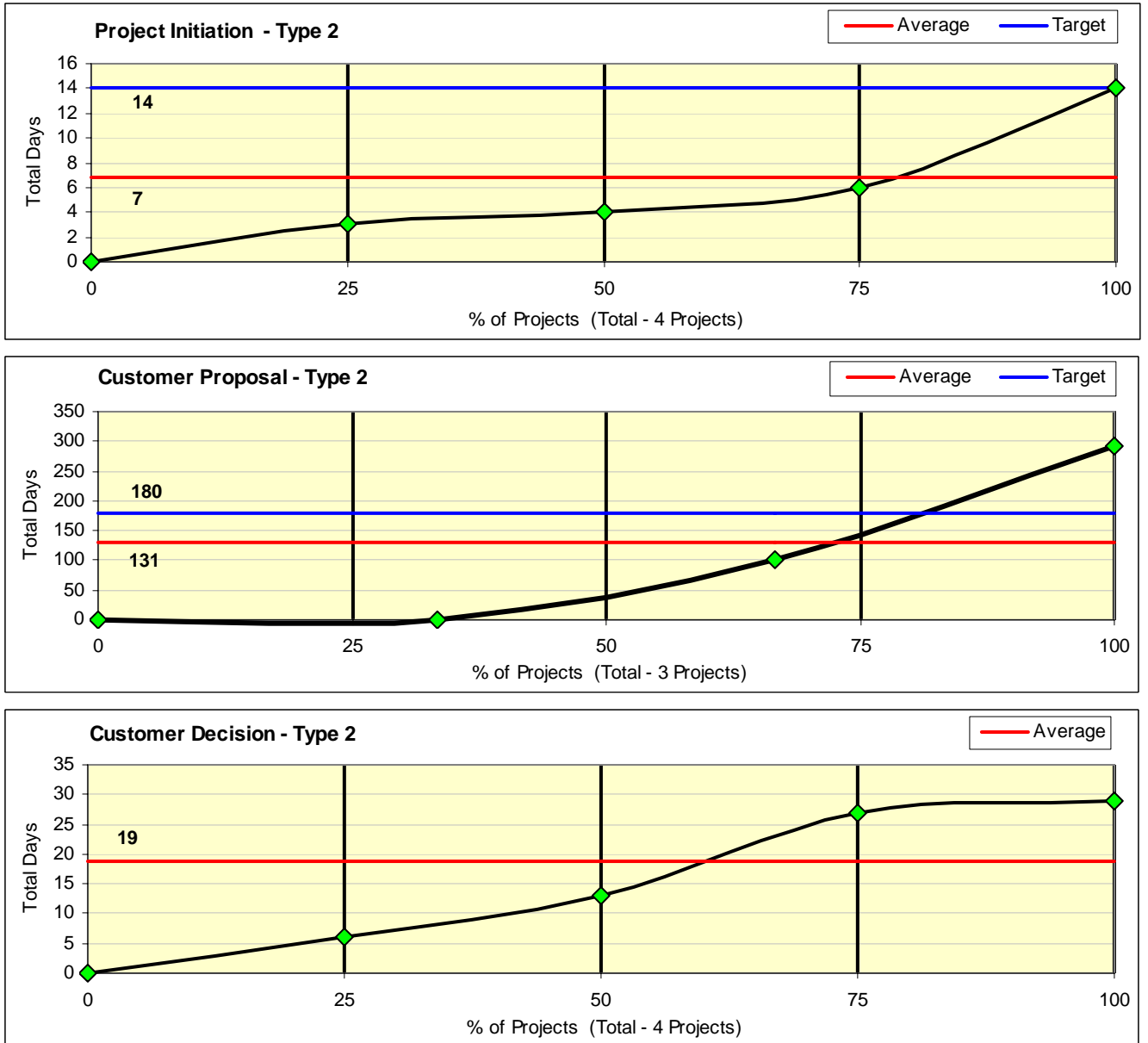
The following graph shows the comparison of average phase durations for Type 2 projects for the current reporting period to those of previous years:

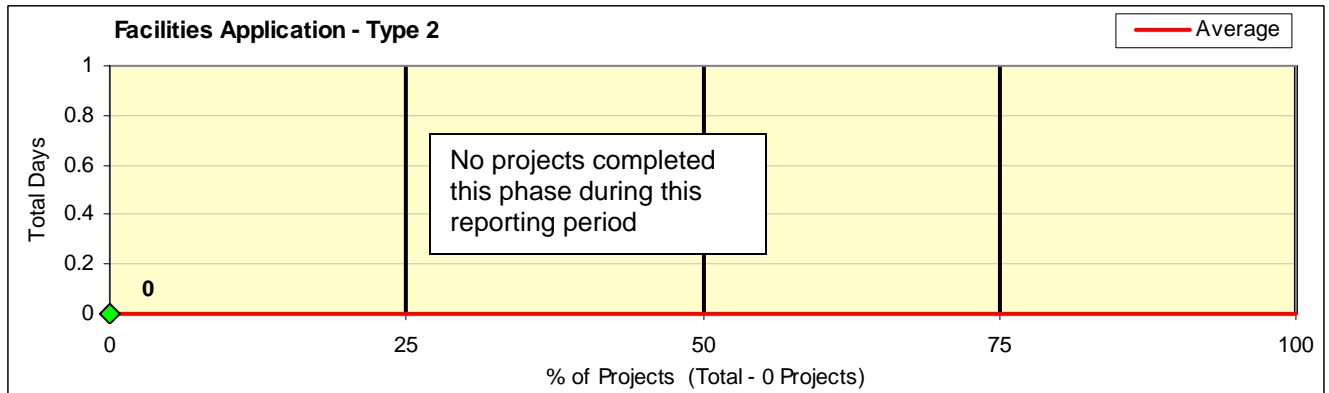
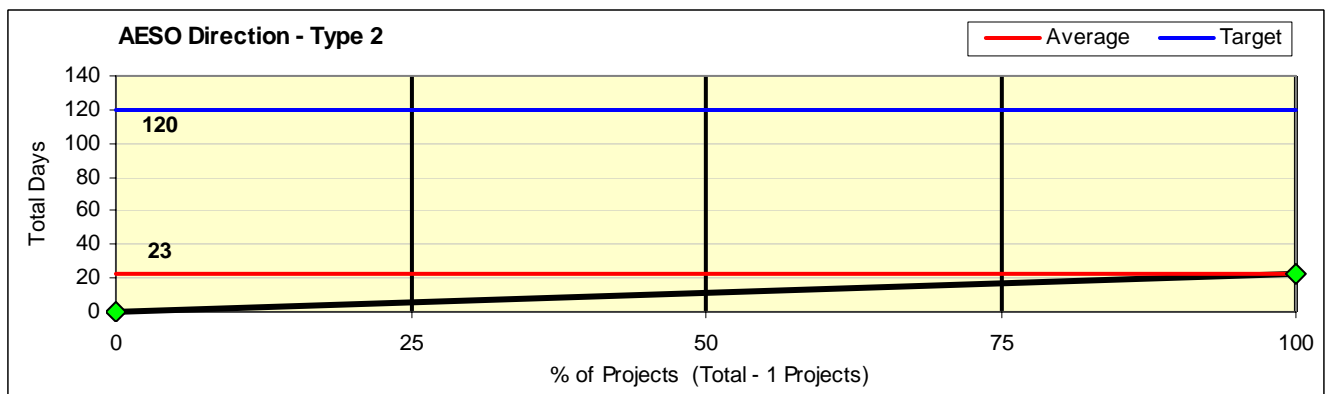
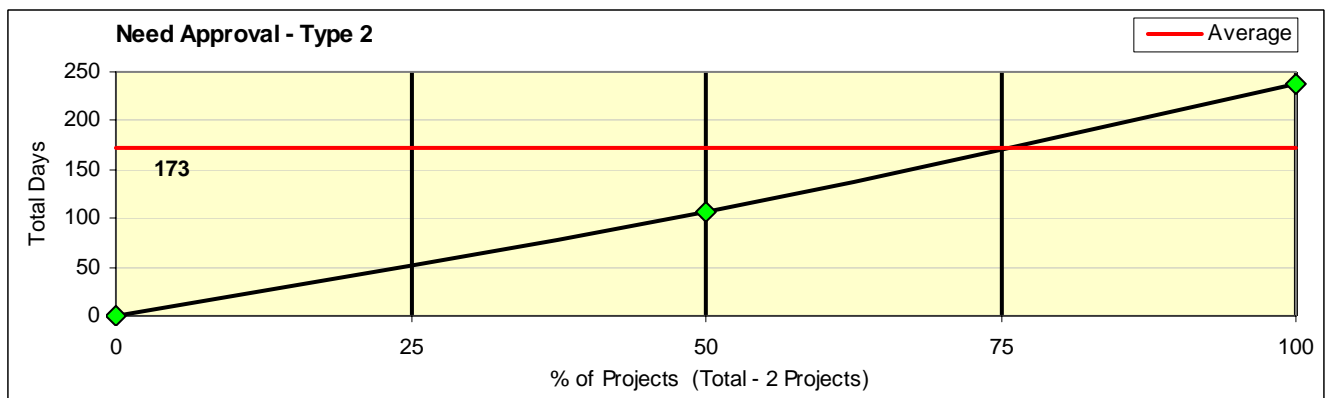
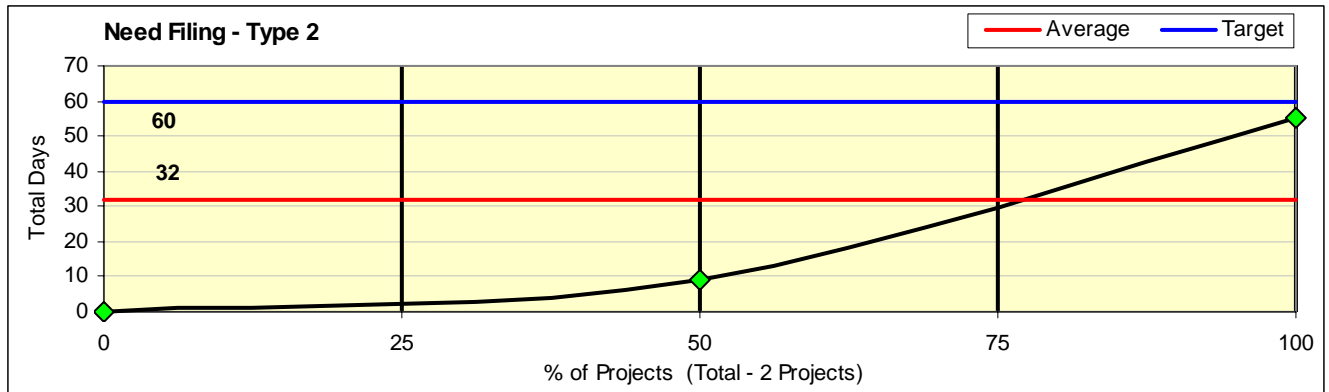


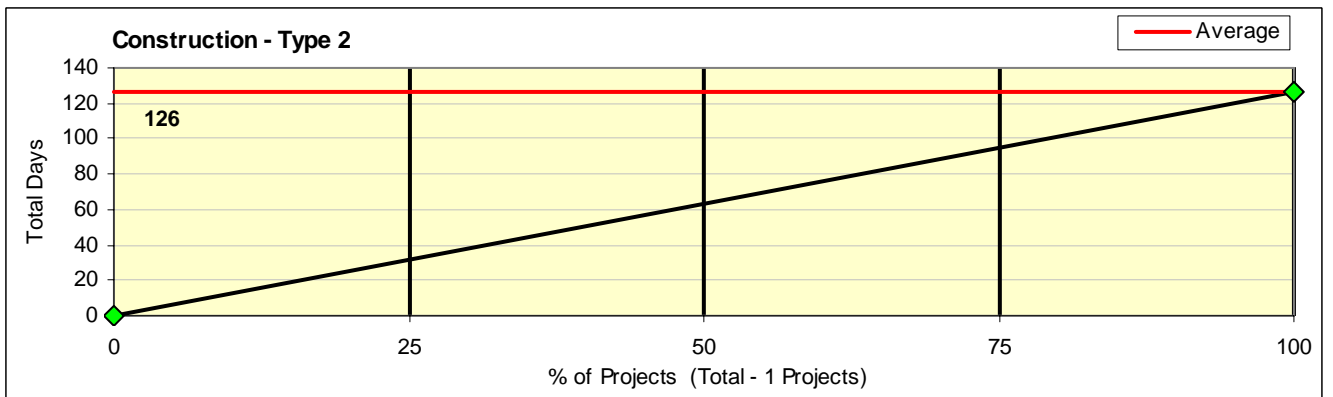
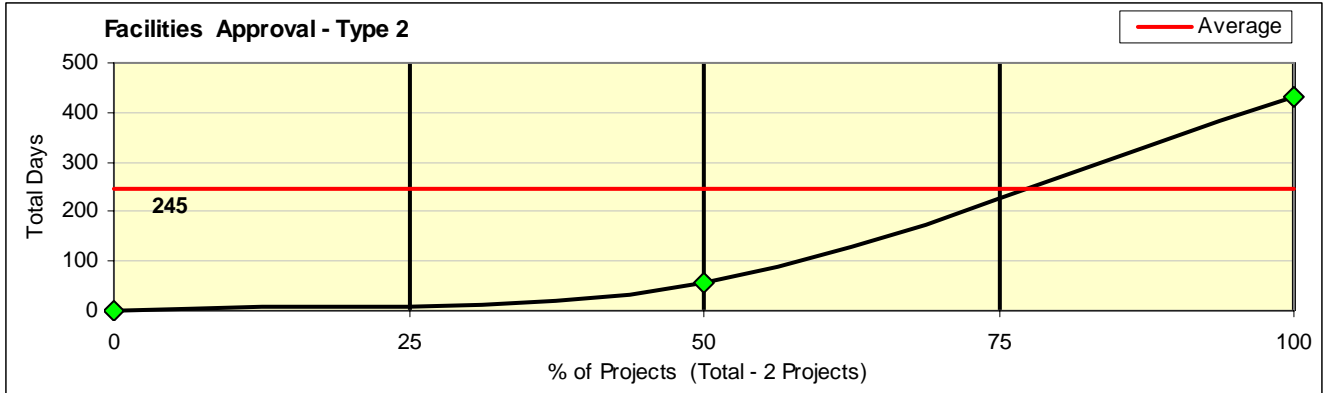
Average Cycle Times for 2006, 2007 and 2008

Due to the low volume of Type 2 projects an average overall cycle time graph has not prepared.

Results for Each Phase for Type 2 Projects



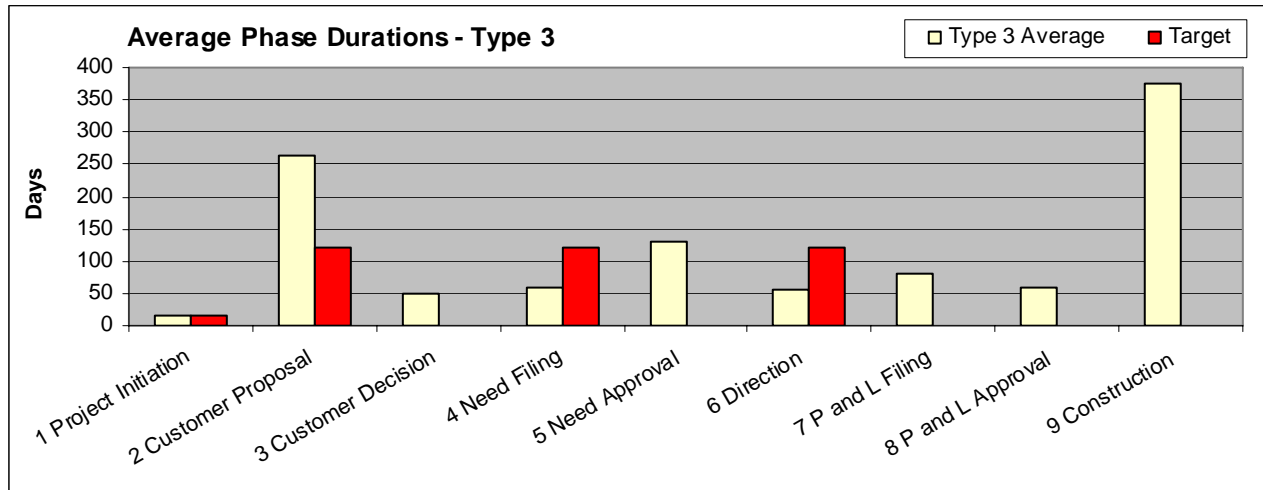




Appendix D – Graphs for Type 3 Projects

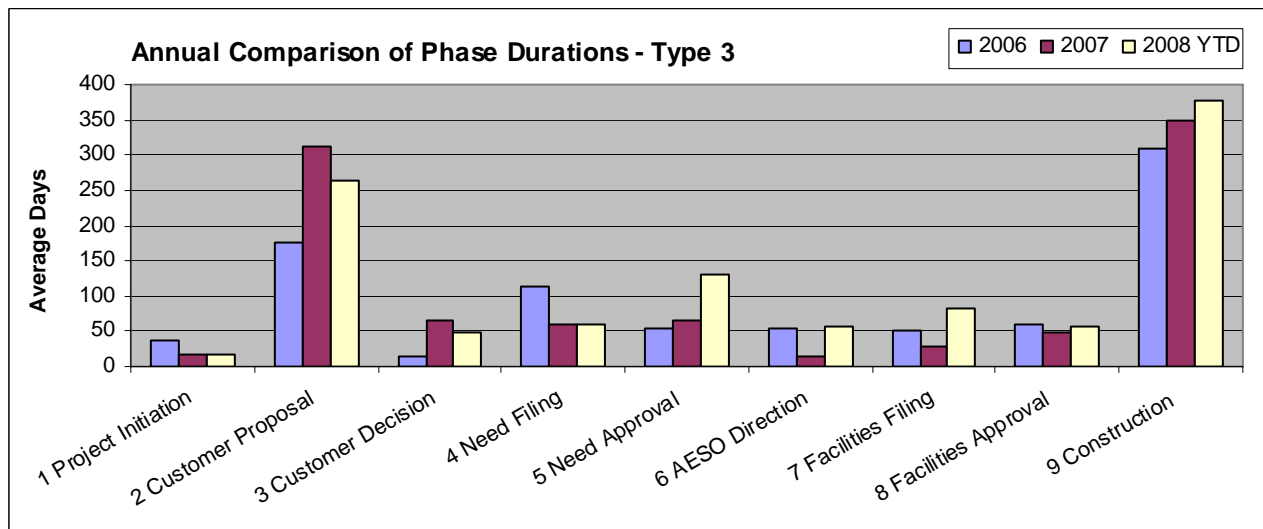
Phase Durations for the Current Reporting Period

The following graph shows the average phase durations for Type 3 projects including targets if a target was established for the specific phase.



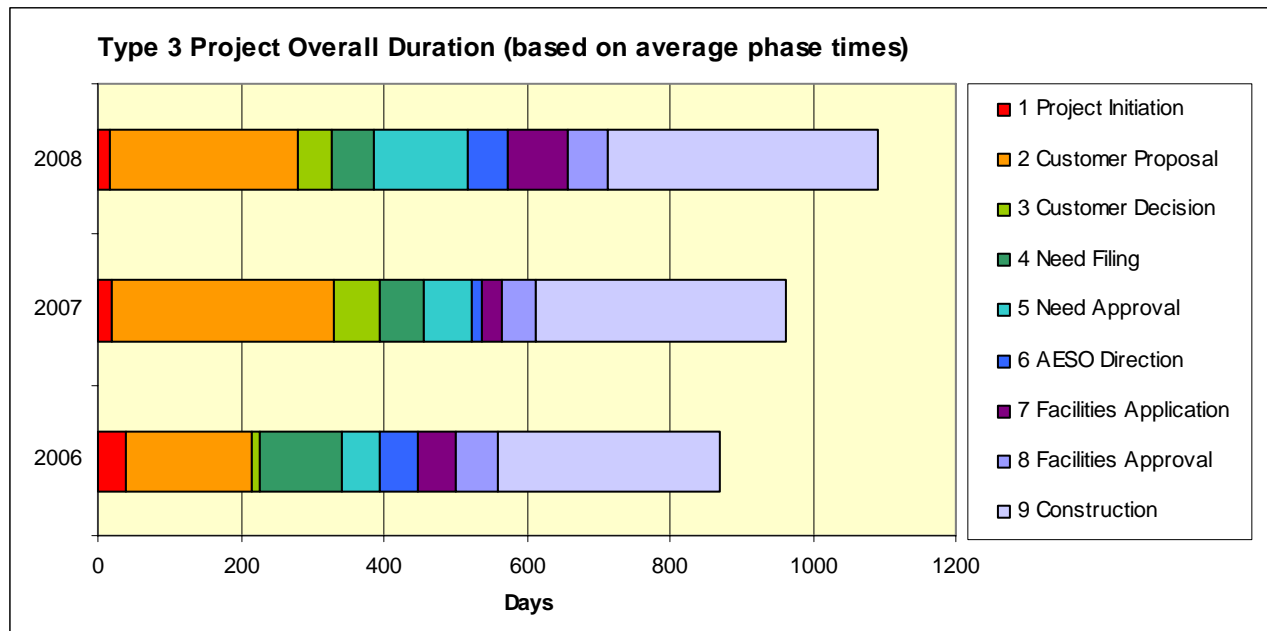
Phase Durations for 2006, 2007 and 2008

The following graph shows the comparison of average phase durations for Type 3 projects for the current reporting period to those of previous years.

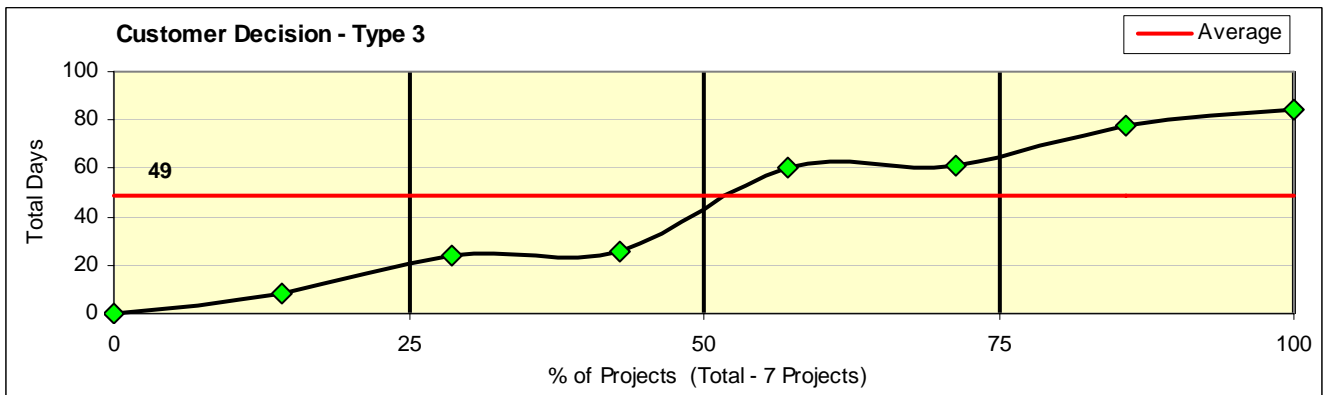
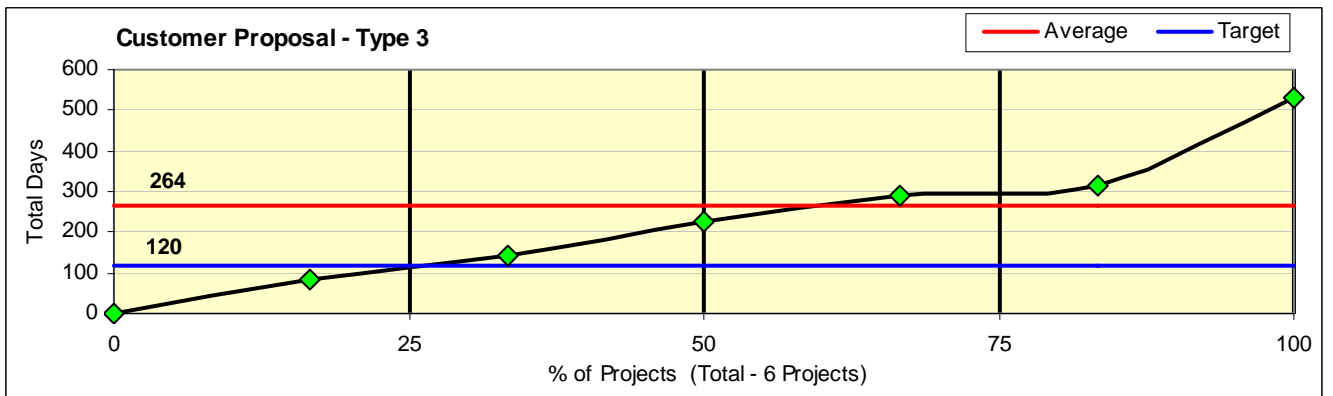
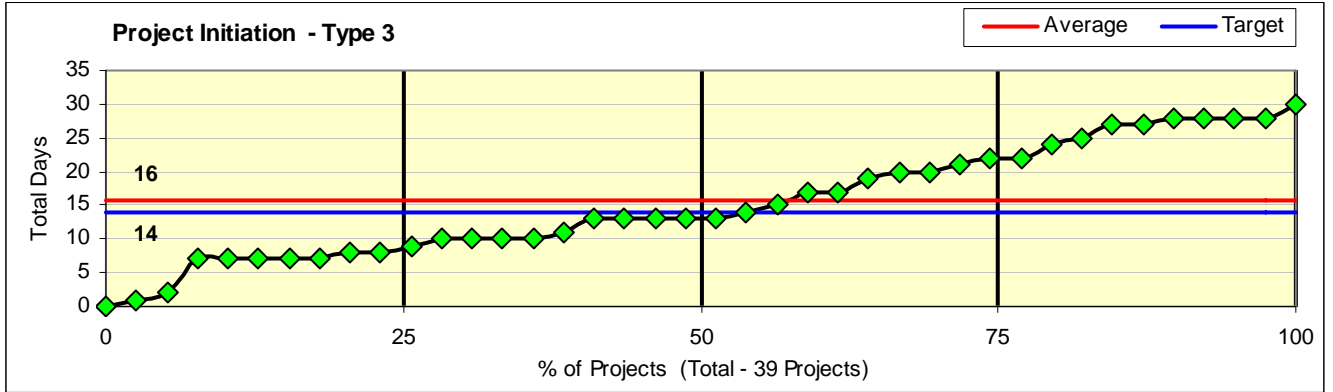


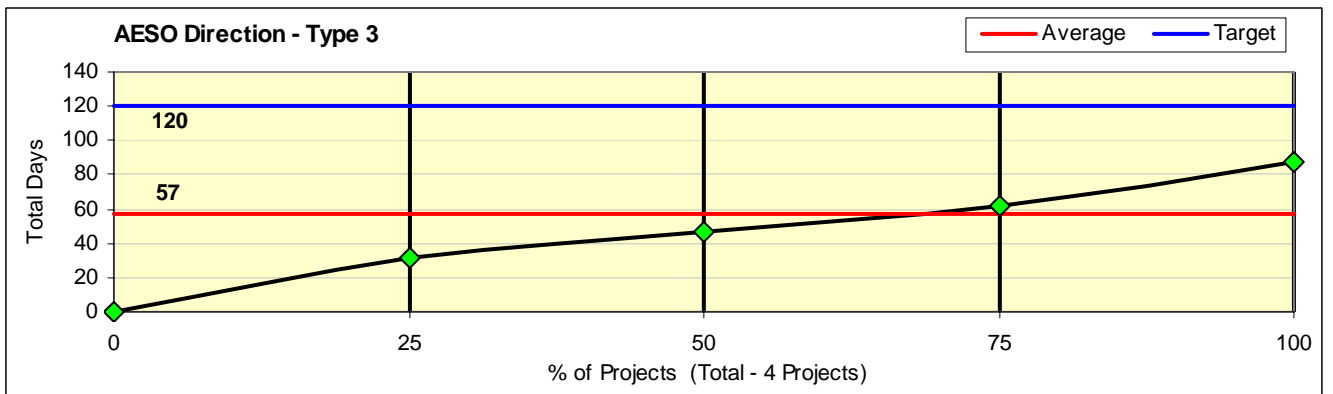
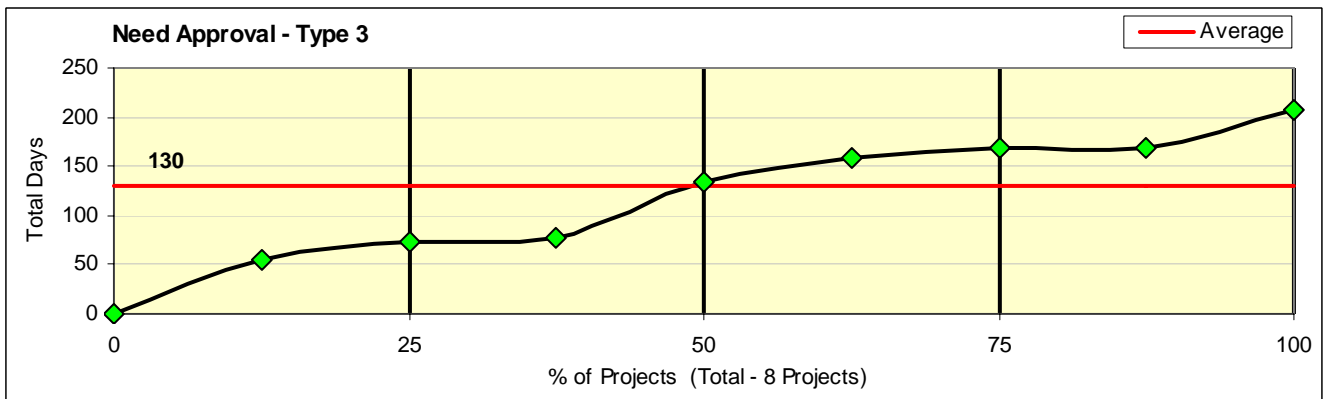
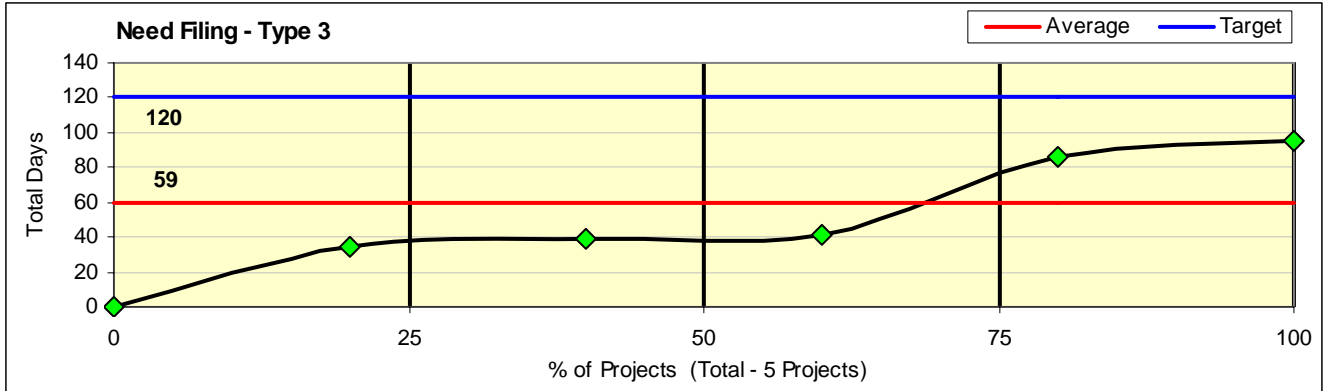
Average Cycle Times for 2006, 2007 and 2008

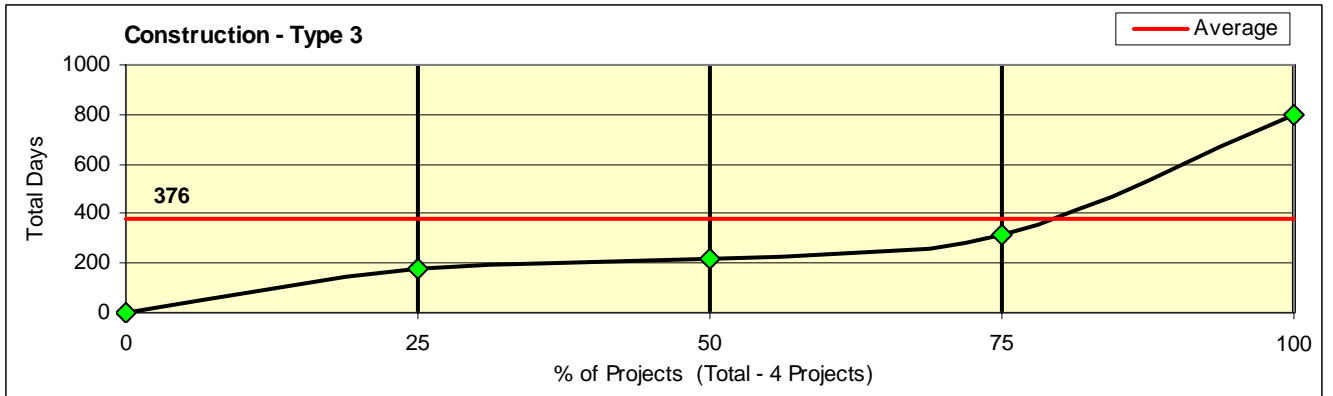
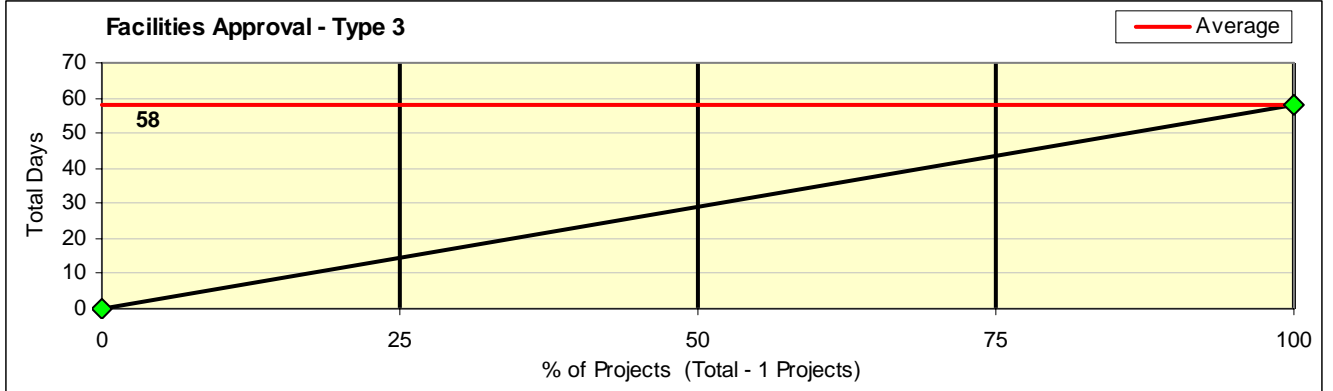
The following graph compares average overall cycle times for 2006, 2007 and 2008. It is important to note that this graph does not represent actual cycle times, only duration times based on averages.



Results for Each Phase for Type 3 Projects







Appendix E – Durations for TFO Cost Estimates

