

PROJECT CONTROLS DEVELOPMENT PROGRAM



 COMMERCIAL PERFORMANCE MANAGEMENT

SPECIAL ACKNOWLEDGMENTS:

Emelyn Paglinawan,

if quitters never win, and winners never quit, where does “quit while you’re ahead “ comes from...?

Chan Hwai Chui,

“the ultimate inspiration is the deadline”



This Training Module is part 4 of an 8 modular training program designed to provide the participants with an overall introduction to the skills & knowledge required by Project Controls when executing an EPCM / PMC project.

The complete training program consists of the following modules:

Module 1 - Introduction To Project Controls

Module 2 - EPC Schedule Development (including P6 user skills)

Module 3 - Services Management (including InControl V8.0 user skills)

Module 4 - Commercial Performance Management

Module 5 - Introduction to TIC Cost Estimation

Module 6 - TIC Management (including Prediction Plus / InControl V10 user skills)

Module 7 - Schedule Risk Analysis (including Pert Master user skills)

Module 8 - Cost Risk Analysis (including @Risk user skills)

The aim of this document is to provide a hands-on guideline to assist the project controller in reporting and analysing internal commercial performance on projects.

Upon completion of Module 4, participants will be able to:

- Develop internal Control Budget
- Understand the basic principles for Commercial Performance Analysis and Management
- PCS Updates and Forecasting
- Understand the project cost-drivers, interfaces and dependencies
- Management of contingency
- Differences between WIP and Earned Income Management
- Cash flow management

COMMERCIAL PERFORMANCE MANAGEMENT

Module Content:

1.0 Preamble	5
1.1 “Show me the money!!”	5
1.2 “Leave us alone; the project makes a profit”	6
1.3 Tools, Procedures and Methodologies.	6
2.0 Cost Recognition	8
2.1 Types of cost	8
2.2 Approval of cost	8
2.3 Labour cost	9
2.4 Non Labour cost (accruals)	12
2.5 Non Labour cost (Receipts)	13
2.6 Overhead cost	14
3.0 Revenue Recognition	17
4.0 Taxation	18
5.0 Foreign Exchange Exposure	19
6.0 Billings and Collections	20
7.0 Reporting	22
8.0 Commercial Project Reviews	24
9.0 Module Exercises - Questionnaires	27
10.0 Module Exercises - PCS	29



1.0 PREAMBLE



1.1 “SHOW ME THE MONEY !!”

As continues to grow and its profitability increases, it is imperative that Senior Management, Project Management, Finance and Project Controls are safeguarding the commercial status or ‘health of its projects.

The platform to review the commercial status of the projects is the Monthly Commercial Review meeting.

During these commercial project reviews the project performance report will be subject to a thorough commercial analysis on a monthly basis.

Traditionally, the focus of a “heritage Worley” project/ program manager was always on getting things done: problem solving, managing work and planning.

The finance group was always more worried about tracking the

money: recognizing revenue, absorbing costs and forecasting the final impact on the company’s bank account.

With the Parsons merger and the official launch of EMS/ WPMP, a new corporate directive was issued making all Project Managers responsible for the commercial outcome of their projects.

Nothing surprising about that, but for some entities this was not common practise, and subsequently, this new directive required a change in mindset for some of the Project Management and Finance departments.

Project Managers were now expected to know the commercial Terms & Conditions of their projects inside out, manage the project budget as if they were spending their own money, and pursue the project revenues with a vengeance, whether its ‘external’ cash from a client or a cross-charge from another entity.

The Finance group suddenly had to provide cost input to the projects that was not just in accordance with generally accepted rules of accounting, but also in a format that made sense to the project breakdown structures.

Financial systems and processes are usually not designed to work in a project-centric way.

Their main functionality is to report the financial results for the Month End and the Financial Year-to-date periods.

As a result, they are not addressing the unique realities of managing project costs.

Project Cost Control systems and processes are predominantly designed to meet the Projects Managers’ requirement to deal with the uncertainties, the risks of project execution and to enable them to make intelligent management decisions.

The functionality of these systems is built around providing Project-to-date expenditure results (which could stretch over multiple Financial Years) as well as accurate indications of where the projects are heading (forecasts).

If the project delivery group and the Finance department would operate and utilize the systems solely to reflect their own goals, it will be very likely that they will end up with two versions of the truth.

There’s nothing more unedifying than a project manager and a finance director waving different versions of the same report at each other.

“The engine that drives enterprise is not thrift, but profit”

~ / ~

John

1.2 “LEAVE US ALONE; THE PROJECT MAKES A PROFIT!”

The objective of every business is to generate revenue and to make profit.

Considering that sons' main (and arguably only) source of revenue is through delivery of projects, the expectation is that each project should always be profitable by default.

The measure of commercial success for a project is therefore not based on delivering just profit, but on delivering the target profit.

Without a fixed and pre-agreed commercial target, project cost performance results can easily be twisted

We only have to drawdown on past experiences to illustrate this:

Project 'X' was recently completed, delivering a healthy

profit of \$ 10M on a contract value of \$100M. With a very satisfied client and a 10% profit margin, the project manager was hailed for his overall performance.

In the same period, a smaller project named 'Y' was also closed out . The project manager barely managed to 'break-even', narrowly escaping a small loss by accepting a last-minute discount request from the client on the last outstanding variances.

Although the client was very satisfied with the technical outcome of the project, the project manager was internally criticized for the projects' poor commercial performance and 'crucified' as an underachiever.

If these projects were assessed against a fixed commercial target, the commercial performances of both projects (and project managers) could well be placed in a completely different perspective.

For instance, if the agreed target for project 'X' was set at \$ 12M, than the project would have lost \$ 2M of profit somewhere along the way, which hardly can be considered a commercial success.

Based on today's average profit-margins, this would mean that _____ will have to secure another US\$ 10M project to recuperate this loss of profit on this project.

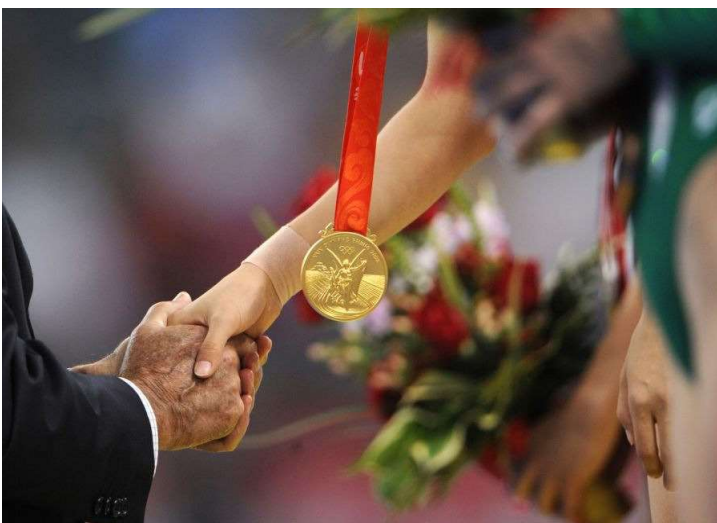
On the other hand, project 'Y' could well have been a 'strategic' project, an opportunity for _____ to demonstrate its capability in an attempt to get a foot in the door with a new client or market.

It is not uncommon that strategic projects compromise on price and even anticipate a small loss for the sake of bigger and more lucrative opportunities further down the line.

From that perspective, bringing such a project in at "break even" would be an achievement worthy of the same accolades that are now received by project 'X'.

1.3 TOOLS, PROCEDURES AND METHODOLOGIES

By making the project managers accountable for the commercial outcome of the project, _____ also assumed the responsibility for providing the project manager with the tools, procedures and methodologies to enable them to manage and control the internal commercial performance of the projects.





To encourage consistency in format and content, regions adopted the PCS (Project Controls Summary) as its standard Project Controls Report for reporting the project health.

The layout and level of detail of a PCS reports can vary across regions depending on size and type of project, but as a minimum it always contains Budget, Actual-to-date and Forecast information for the project.

The cost Actual-to-date data are provided at the required cut-off date by the Finance department, while budget and forecast information is a responsibility of the Project Controls function.

The introduction and implementation of GBS (Global Business System) has shown significant improvements in aligning the 'actual-to-date' numbers be-

tween Projects and Finance, traditionally an area of controversy in project-centric business environments.

GBS is an Oracle based integrated HR & Finance system that is designed and configured using project accounting principles.

The system, together with the associated work processes and code-structures, ensure that both the project view and the accounting view are kept in line.

However, not all entities are GBS enabled yet and some of these entities don't have automated work processes that would drive clear understanding and agreement between Projects and Finance on how the project should be reported financially in accurate and meaningful way.

To this end, this training module will provide directives and guidelines from a Finance, Project Controls and Project Management perspective on:

- Cost Recognition
- Revenue Recognition
- Taxation
- Forex exposure
- Profit Nett Margin
- Reporting
- Commercial Review Process

In the second part of this training module, the participant will be applying these 'playground'-rules to update a monthly PCS report.

“What’s the
use of money
if you have to
earn it? ”

~ / ~

George
Bernard
Shaw

2.0 COST RECOGNITION

2.1 TYPES OF COST

We can differentiate four main types of cost:

- Labour cost recognized through the timesheet system. (time-efforts)
- Non-Labour cost recognized through accruals (Lump Sum commitments; Provisions etc)
- Non-Labour cost recognized through receipts (Invoices, Expense claims etc)
- Overhead Allocations

To achieve alignment between Projects and Finance certain rules must be followed by the Finance, Project Controls and Project Management groups in terms of capturing and processing the incoming cost-data.

2.2 APPROVAL OF COST

A number of issues can trip you up when managing project cost.

Even when it is agreed what costs are going to be allocated to which project and how they will be calculated, there is still the issue of making sure that they are tracked accurately.

The most inconvenient time to find out what costs you've been hit with is when you get the monthly accounting reports.

Often, these reports lack the detail you need for traceability, and trying to get them clarified or changed can quickly turn into a "Mission Impossible".

In principle, no cost should be recognized as project-cost without approval from the Project Manager.

It is therefore mandatory that all WP entities will have a detailed workflow in place that prevents allocation of cost against a project and WBS element without approval of the Project Manager.

The WP entities that are GBS enabled are required to capture cost against a project WBS and a Code of Account.

Once captured, cost will flow automatically through a rigid, electronic approval cycle before they get posted to the accounts and recognized as a valid project-cost.

The GBS approval process ensures that both streams (Finance and Project Controls) are reporting from the same source cost information.

The WP entities who are not on GBS yet will probably utilize less advanced and stand alone Finance systems to manage their accounts (read: not based on project accounting principles). These Finance systems will probably have multiple interfaces with the specific Project Controls tools.

Further, chances are that there will be two separate cost-structures existing in one business environment: a Ledger-based structure to facilitate accounting requirements and the project execution structures (WBS) to manage project cost performance.

The accounts ledger-coding will be the same across the business and projects, while the project WBS requires ultimate flexibility, since it is driven by specific project/client/Improve contract-requirements.

Although project costs need to be approved and allocated to the project WBS/CoA by the project manager/controller, it is still common that some of these cost are entering the accounts directly without knowledge of the project (e.g. receipt of a 'blanket' travel agent invoice for all flights booked by the company over a specified period, regardless of project).

Capturing cost against two different cost-structures will eventually lead to extensive data-mapping between the two cost structures, with possibly some manual "slice & dice" efforts to make the shoe fit for both functional requirements.

This can result in misalignment in cost-recognition, different interpretation of project results and confusion regarding data-ownership.



“If you want
to find the
rabbit, you
got to work
the hat ”
~ / ~
David
Copperfield

The absence of automated checks & balances makes it even more important for all “non GBS” entities to have a sound time-and-expense reporting system in place as well as a bullet-proof sign-off process for all cost that requires correct WBS code allocation and approval by the Project Manager before landing in finance’s in-box.

2.3 LABOUR COST

Capturing of labour cost as well as the approval-routines are well defined in most WP entities.

Labour cost is recognized via the weekly timesheet booking based on the “booked hours x cost rate” principle.

Labour reports are available out of GBS or alternate Timekeeping software when the weekly time-recording process has been completed.

Raw Cost Rate

The labour cost rate is built up using the following components

- Gross Salary (including income related tax)
- Payroll Burden

Example of a Salary Rate computation

Annual Gross Salary
Gross Working Year

E.g. Annual Salary of \$60,000

60,000
(40 hrs x 52 wks)=2080

Salary Rate = **28.85** per hour

Note: the gross working year could vary between countries.

Payroll burden is defined as the additional costs, beyond salary,



to the company to employ an individual. Depending on location, calculation and maintenance of Employee Payroll Burden could be the responsibility of HR, Finance or even the Cost Manager of Project Services Department (GBS environment).

To ensure accurate labour cost to date reporting, it is essential that the payroll burden of new staff, as well as revisions of salary & burden of existing employees will be updated in the Finance systems within one working-week (5 days) by HR Department.

Example of Salary Burden computation:

a) Holiday & Sickness days as a % of the Gross Working Year. (will vary between countries)

	Days	hrs	%
Annual Holidays	12	96	4.62
Statutory Holidays	8	64	3.08
Sickness Days	12	96	4.62
Sum	32	256	12.32

Nett Working Year = 2080 - 256 = 1824 hrs

Grossing up Holidays & Sickness percentage to recover in 1824 hours

(12.32/1824) * 2080 = 14.05%

b) Payroll Burden cost elements as a % of salary on a company basis. (Note: the cost elements can differ between countries)

PB Cost Elements	%
Superannuation/Provident Fund	5.0
Employers liability insurance	1.0
Personal Accident	0.5
Medical insurance	1.5
Allowances	1.0
Life Insurance	4.0
Workers compensation	1.0
Sum	15.0

Gross up payroll cost elements to recover in 1824 hours:

(15.0/1824) * 2080 = 17.10 %

Salary Burden % = a + b
14.05 + 17.10 = 31.15%

Based on the computations of this example, the Gross Cost Rate of this employee will be

Salary Rate = \$ 28.85 +
Salary Burden 31.15% = \$8.99
Raw Cost Rate = \$37.84

Proof:

Annual Gross Salary = \$60,000
Salary Burden 15% = \$9,000
Total Salary & SB = \$ 69,000

Recovery via cost-rate:
1824 hours x \$37.84 = \$69,020

IEWO staff

Incorrect recognition of cost and revenue for IEWO staff can be a major contributor to understated incurred cost and overstated profit.

The appropriate cost recognition method for IEWO staff will depend on the basis of the IEWO agreement between the entities:

- Reimbursable IEWO agreement
- Lump Sum IEWO agreement

If IEWO-staff are charged to the client based on approved timesheets and agreed contract rates, it is mandated for the "host" entity to have a reimbursable IEWO agreement in place with the "supporting" entity. This is to ensure that the required back up for client invoicing is fully transparent.

IEWOs on lump Sum basis can only be considered if:

- a) there is a defined scope of work between the two entities
- b) the project in the "host" location is also on Lump Sum basis.

Lump Sum IEWOs are considered Non Labour costs and as such discussed in section 2.4 Non Labour Accruals

Reimbursable IEWO staff

The method of cost recognition for reimbursable IEWO staff can be differentiated in 3 categories:

- 1) Cost recognition when both entities are GBS enabled
- 2) Cost recognition when only the "host" entity is GBS enabled.



3) Cost recognition when only "supporting" entity is GBS enabled or when both entities are not GBS enabled.

1) Both entities are GBS enabled - Because GBS is a global single instance system, the project can utilize the cost information of all resources that are authorized to charge to the project from one source.

The project will accrue cost and revenue of the IEWO staff as per their man-hours bookings.

Within the projects module of GBS, the Transfer Price Schedule (IEWO) rate will be used as their cost rate.

It is imperative that the Transfer Schedule rates are correctly set up in GBS to avoid IEWO employee "raw" cost-rates being reported instead (meaning Salary & Salary Burden rates only).

Failing to do so typically results in under-reporting of cost (host entity) and revenue (supporting entity).

The IEWO costs will be recognized once the inter-company invoice has been processed between supporting (Accounts Receivable) and host office (Accounts Payable).

Inter-company invoicing should ideally be run during weekend processing to avoid delay in transfer price recognition.

If the inter-company invoicing process is not run, the project will only recognize "raw"-cost and not the "true" cost.

2) Only "host" entity is GBS enabled - IEWO staff of the supporting entity are adopted as "contingent" employees by the host location.

IEWO staff will be assigned a "contingent" Staff ID and are expected to submit a weekly timesheet into GBS, booking their time against the appropriate project coding structure (WBS/COA) and following the projects' approval procedures and time-line.

The IEWO-rate of the IEWO employee will be his/her cost-rate, and can include other direct costs such as mobilisation, accommodation etc.

The agreed project contract-rate will be the charge-rate for the IEWO employee (bill rate). The project will accrue the cost and revenue of the IEWO-staff as per their man-hours bookings.

“I spent most
of my money
on booze,
women and
fast cars. The
rest I just
squandered”

~ / ~

George Best

As the cost is already recognized on the project via the man hour bookings, the actual invoice received from the supporting entity for the IEWO staff will not be booked to the project upon receipt, but posted into an Contingent Worker Clearing Account in the balance sheet for reconciliation with the actual approved project cost.

This way understated monthly incurred cost (and overstated profit) due to delayed received IEWO-staff invoices is no longer an issue.

In addition to the above, the IEWO-staff will also continue to follow the weekly timesheet routines in their respective home entities. A project will be initiated in the supporting entity for the secondment of IEWO-staff.

The cost-rate calculation will be as per section 2.3 - Labour Cost, while their charge-rate is as per IEWO agreement with the host location.

Note: To avoid double-dipping in turnover and cost when consolidating the results for the entire region, it was agreed that only the cost and revenue and man-hour-bookings of the Host-location (Project Owner) will be recognized for regional consolidation purposes. The location providing the resources to the Host location (Project Owner) will identify the project as an “Internal Project” in order that the ratification of revenues and profit at a regional level can be ratified.

3) Only “supporting” entity is GBS enabled or both entities are not GBS enabled

If neither the host entity or both entities engaged in the IEWO agreement are GBS enabled,

the IEWO employees will be assigned a “temporary” Staff ID and included in the time-booking system as an “own” employee.

A unique identifier may have to be added to exclude the employee from the host entities pay-roll system.

All other routines are identical to the method described for “Only host location is GBS enabled”;

- The IEWO-rate of the employees will be used as their cost-rate, and the agreed contract-rate as their charge-rate.
- The project will accrue the cost and revenue of the IEWO-staff as per their man-hours bookings.
- As the cost is already recognized on the project, the actual invoice for the IEWO staff will not be booked to the project upon receipt.
- Upon receipt of the invoice from the supporting entity, Finance will post the received invoices into a Clearing Ac-

count, and reconcile them with the project cost at Month end on corporate level.

Subcontracted or Seconded Staff

The rules for external sub contracted and seconded staff are identical to the directives for IEWO staff described in 2.2

Subcontracted Staff that are reimbursable to the client are adopted by host-entity as either “contingent” employees or “temporary” staff and will be assigned “contingent” or “temporary” Staff IDs.

The contractor is expected to submit a weekly timesheet to the location of the contract-owner, booking their time against the Projects’ coding structures and following the projects’ approval procedures and dead-line.

The Charge Rate to the client of the Sub-contracted employee will be his/her cost-rate to the contractor, while the agreed project contract-rate will be his/her charge/sell-rate to the client.



The project will accrue the cost and revenue of the subcontracted-staff as per their man hour booking.

As the cost is recognized on the project as labour, the invoice from the contractor for their seconded staff will not be booked to the project.

Upon receipt, Finance will post the received invoices into an Agency Clearing Account in the balance sheet, and reconcile them with the approved project costs.

Therefore, it is essential that Finance Department to be notified who are the contingent workers to prevent wrongly postings to projects.

As with the IEWO cost recognition methods, this practise will prevent understated incurred cost and overstated profit due to the delay in received subcontract invoices.

2.4 NON LABOUR COST (ACCRUALS)

Cost accruals are the estimated dollar value of costs incurred for goods or services received, but for which an invoice has not been received. Accrued costs

are reversed the following month in anticipation of invoice receipt. *(Note: accruals for Provisions will be discussed separately on page 13)*

As part of the financial month close process (GL Close), project controls will inform the Finance department what project accruals and provisions are required for the month. Once reviewed and where necessary adjusted the costs will be entered as accrual costs into GBS or alternate Finance system for monthly reporting.

Lump Sum IEWOs

When a Lump Sum agreement is in place between two entities, the IEWO should be treated as an 'external' Lump Sum Contract.

Cost is accrued on the project as a non-labour cost using the following calculation:

$$IEWO \text{ Value} \times \% \text{ Complete}$$

Progress should be verified and approved by the Project Manager and submitted by Project Services to Finance at Month End cut-off.

The supporting entity will be

required to set up a local project for capture of cost, revenue recognition and invoicing against the lump sum scope of work.

Lump Sum Sub Contracts

The rules for cost recognition for external Sub Contracts and Sub Consultants are identical to the directives for Lump Sum IEWOs

Cost for LS subcontracts is accrued using the following calculation:

$$\text{Subcontract Lump Sum Value} \times \% \text{ Complete.}$$

Progress should be verified and approved by the Project Manager and Subcontract Cost Accruals will be submitted by Project Services to Finance at Month End to allow cost accrual to be entered into GBS.

Provisions and Contingencies

Provisions and contingencies are established either at the bidding stage or during the project execution stage and approved by the CEO, GM or PM depending on the size of the provision made at the time.



“Spare no
expense to
save money
on this one ”

~ / ~

Sam
Goldwyn

It must also be noted that provisions /contingencies must be reviewed on a regular basis to ensure it reflects possible changes to the project operating environment.

Provisions have specific definitions in financial terms and there are specific requirements per the financial guidelines, and as such will be adhered to within the financial reporting.

Contingencies are project management responsibility and will not be reflected in the financial reports.

Provisions

A provision is a sum identified to meet the cost of an event, which if it occurs, may take place after project completion but during the warranty period, (the so called known unknowns).

The amount provided should be the best estimate and based on past experience, contractual obligations and customer relations.

In general the amount provided is for meeting the contractual obligations during the warranty period and liquidated damages for any delays or non performance.

For example, Projects with specific clauses such as Defect Liability Period (DLP), Warranty Period (WP) etc. (so called known unknown's) provisions can be allowed for in a separate project 'non-labour' category.

For Reimbursable projects, Project Controls will provide the Provision amount to Finance Department for accruals into



GBS or alternate Finance System.

For Lump Sum projects, Provision amount will be included in the cost to complete thus provided as expected future cost to spend if needed.

Provisions will be based on proper valid reason/back-up in order for Finance to take this accrued cost into the accounts.

Contingencies

This is where a sum is identified to meet the cost of a future or unknown event, (the unknown unknowns) which if it occurs, will take place during the project execution stage, this contingency may also be utilised to cover such issues as cost over runs, procurement under pricing and sub-contractor delays.

Contingency is held by project management, and is generally provided for lump sum projects, but could be provided for in some circumstances on reimbursable contracts.

Contingency drawdown guidelines are provided in Module 1 - Introduction to Project Controls.

2.5 NON LABOUR COST (RECEIPTS)

Non-labour expenses will be received and entered into AP

(Accounts Payable) by the finance department.

All expenditures entered into GBS or alternate Finance system must be registered against a project and WBS & Code of Accounts.

Finance will match the expense with a Requisition/Purchase Order and match the expense to the project and WBS.

Where allocation to the correct project/WBS is unclear finance will ask project and cost custodians for non-labour booking details.

Once entered into the Finance System non-labours will go through a two step approval.

The non-labour will be checked for correct coding and cost by the "Project Controller", if project has an allocated project controller key member type, before undergoing Project Manager Approval.

The exception to this is non-labours cost that are part of employee payroll burden, as these costs have already been allocated to projects, through the payroll burden in the cost rate.

Therefore Finance will enter these expenses directly into AP against the burden account.

This account can then be periodically reconciled, by finance, against payroll burden and the over/under recovery will be allocated back to the entity's bottom line (in other words, Salary burden under or over recovery should never affect the projects' P & L)

2.6 OVERHEAD COST

Overhead, overhead cost or overhead expense refers to an ongoing cost of operating a business such as office rent, gas/electricity, management, office support staff wages, legal fees etc.

In _____ overhead can be classified under 3 headings:

- Operational Overhead
- Non Operational Overhead
- Business Unit Overhead

The Operational and non-operational Overheads directly effect the project bottom-line.

The Business Unit Overhead only impacts the bottom line of the Business Unit (CSG) and their EBIT contribution (Earned Before Income Tax) to the entity's bottom line.

As mentioned in Chapter 1.1, Project Managers are responsible for the commercial outcome of the project.

It is worth highlighting that there are differences in view between the _____ regions on what this really means in terms of delivering the projects' P & L (Profit & Loss)

In some regions the Project Manager is responsible for delivering the target Project Nett Profit margin, while in other regions their responsibility stops at delivering the Gross Profit targets.

The Nett Profit Margin is the Gross Profit Margin minus Operational and Non Operational Overhead allocations.



In _____, there are currently two common business practises to allocate overhead cost to projects;

- allocation via a fixed estimated hourly rate multiplied by the chargeable man hours (so called "Standard Costing")
- or discretionary distribution of monthly overhead cost to the projects by the Finance department.

Although there are strong arguments for and against both overhead allocation practices, it is generally acknowledged that in environments where the discretionary distribution method is applied, project managers can't be held accountable for delivering a Nett Profit target, simply because they won't be able to control (or forecast) the overhead cost.

In those entities, the project manager is responsible for delivering the Gross Profit Margin.

In entities where Standard Costing is practised, the project manager will be accountable for the Nett Profit Margin.

Computation and maintenance of these fixed overhead rates is a Finance responsibility, however, it is important that the Project Controller is aware of how these rates are built up.

Operational Overhead

Where time cost and expense can be directly attributable to a specific project then the allocation must be to the project as a project expense.

However, there are also costs associated with providing a service (or goods) to the Operations that cannot be directly attributed to any one project in particular.

These costs are treated as operational overhead cost.

When applying the Standard Costing methodology, these overheads are allocated to projects via a fixed overhead rate per hour, based on the time sheet allocation of man-hours (defined as "chargeable man-hours"):

Operational Overhead rate x chargeable man-hours

The same Operational Overhead rate is applied to time bookings across all projects.

“If I had to live my life again I’d make all the same mistakes - only sooner”
~ / ~
Tallulah Bankhead

The hourly Operational Overhead rate that is charged to projects is therefore the same for all staff employed by that entity.

In cases where an employee is seconded to the client office (JV partner office) or site office, a specific operational overhead can be calculated and applied to these employees whilst out of the home office.

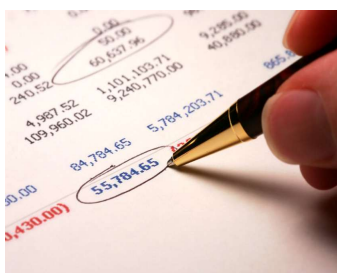
The computation of the overhead rate is based on the budgeted cost of overhead time and expenses for that Financial Year (set at a breakeven level) and is used as a standard for a fixed period of time, which is generally for a period of one year.

Total Oper. O/H Amount for FY
Chargeable man-hours for FY

The rate is computed during the annual budgeting process by Finance and requires monitoring on a quarterly basis to ensure that the over /under recovery is at a reasonable level.

If a substantial variation in recovery occurs then the rate must be adjusted to reflect a changed situation.

In such event, the new adjusted overhead rate will only be applied to all future time bookings, across all projects. (so no adjustment to historic cost)



It is very important that the standard operational overhead rate charged to projects is reasonably accurate, as incorrect standard rates could lead to large inaccuracies in overhead recovery (over/under).

This leads to a substantial proportion of the profit or loss appearing as a over/under recovery in the Company’s profit and loss rather than reflected in individual projects profit & loss and therefore in the contract margin. For this reason it is important to review the rate on a quarterly basis.

When applying the Discretionary Overhead Allocation method, the Finance department allocates the monthly incurred overhead cost as they occur and as they see fit.

Unlike the Standard Costing method, this method is very suitable for manipulation.

Discretionary allocation of overhead cost makes it relatively simple to make the Nett Profit performance of one project look better by getting overhead charges assigned to other projects, hence the reluctance of Project Managers to take on Nett Profit responsibility for their projects in such environments.

Below are a few examples of costs that can be defined as Operational Overheads. The list can vary between entities and regions:

- Time cost Technical department coordination
- Computer Services (license fees, lease rental and depreciation) *Note 1
- Building Services (utilities,

rents, depreciation of furniture, telephones/telex, building insurance)

- Reprographics Department
- Training (engineering and other operational staff)
- Company cars (operational staff)
- Technical fees

**Note 1 – Each location is expected to list all software that is utilized for normal operations and include in the calculation of Operational Overhead. All specialized software that is excluded will be charged to Projects as specific Non-labour costs and should be budgeted within the project’s control budget.*

Non Operational Overhead

The Non Operational Overhead can be summarised into the following three categories:

- Entity or Location Corporate Overhead
- Regional Corporate Overhead
- Global Corporate Overhead

The global, and regional Corporate overhead budgets covers for the global and region management and support services and will be provided by the regional Finance Manager.

This will be in the form of an allocated budget figure. In a Standard Costing environment, the entities will distribute this amount across the predicted chargeable man-hours.

The Entity or Location corporate overhead covers the cost for departments of a general nature and associated expenses for that entity.

It is also referred to as "corporate services departments", due to the nature of the service provided, such as the Finance and Human Resources etc.

Below a list of examples of costs that would be classified as Entity corporate overheads:

- CEO/General manager
- CSG/BU Manager(s)
- Finance department
- Legal& Contracts group
- HR department
- Technical fees
- Cost of cars (corporate staff)

In a Standard Costing environment, the Non operational overhead will be recovered based on the same concept as used for Operational Overhead recovery; a fixed rate per hour, charged via chargeable man hours to projects.

The recovery rates for both Operational and Non Operational overheads are set annually as part of the budget process.

To monitor under and over recovery against the budget, a review every quarter is advised in order to revise if there are major inconsistencies in the recovery rates.

Business Unit Overhead

Many entities are multi-CSG (Customer Sector Group), meaning that the entity delivers projects across the 4 main CSGs: Infrastructure, Minerals & Metals, Hydrocarbons or Power.

The entity CSG managers are called Business Unit General Managers (BUGMs) and unlike the Regional and Global CSG managers, the BUGMs do have "Bottom Line" responsibility.

Subsequently, multi CSG entities have a requirement to track and report Business Unit cost performance on a monthly basis.

Each Business Unit can have its own specific overheads, such as cost for Business Development efforts, specialized tools, stand-by time etc.

To avoid projects subsidizing the BU overhead of another, the specific Business Unit overheads are separated from the entity's Operational and Non Operational overheads and recovered in a different way.

The business unit overhead is to be kept to a minimum and shall be limited the costs associated with the following:

- Business Development and Marketing by CSG/BU
- Strategic CSG Initiatives
- "Special" Tools
- Non billable time / Under utilisation of CSG/BU specific resources

The Business Unit Overhead (BUOH) will be maintained as a budget number, and need not be calculated into a man-hour rate, i.e. it will be treated "below the line" in terms of project performance.

This means that Business Unit overheads do not impact project cost performance, and are therefore not relevant to Project Delivery.

The Business Unit P & L performance and recovery of their budgeted BU overhead is the responsibility of the BUGM and not a Project Controls function!



"The chief cause of stress is reality"

~ / ~

Lily Tomlin



3.0 REVENUE RECOGNITION

The following section outlines the Revenue-to-date recognition methodologies and procedures for the following contract-types:

- Reimbursable Projects
- Lump Sum Projects

The revenue-to-date recognition on projects is governed by policy documents issued by Finance. Finance policy documents 2-0001 to 2-0005.

The Accounting Policies can be found in the Global Finance Website via the Finance & Administration link on the NOW page, and states the following in Summary:

Reimbursable Contracts

Policy Document 2-0001 Cost Plus Contracts:

The treatment of reimbursable contracts in terms of the recognition of revenue is based on reimbursability of booked hours and non-labour expenditures. It is the responsibility of projects to provide the project bill rates for input into GBS or alternative Finance systems to allow weekly recognition of revenue.

Lump Sum Contracts

Policy Document 2-0002 Fixed Price Services Contracts:

Finance recognizes revenue on Lump Sum projects using the following calculation:

$\% \text{ Complete} \times \text{Contract Value.}$

The % Completion calculation used for Revenue Recognition is "cost-based" rather than "Earned" (physical progress):

$$\frac{\text{Total cost to date}}{\text{Forecast cost at completion}} \times 100\%$$

"Total cost to date" should include all cost accruals.



"Forecast cost at completion" should always include contingency (if any) to ensure that Finance does not automatically accrue project contingency as revenue into their accounts.

This recognition rule also applies If the contract has specific milestones that requires a sign off by the client.

A Milestone Progress payment agreement is an agreement between the client and the contractor on how and when the client will be invoiced for the services provided and has no relevance to the way revenue is recognized.

Although the Finance revenue recognition formula is solely used for financial reporting purposes, the values required for the formula are sourced from projects.

The cost based revenue recognition method prevents over recognizing of profit (Revenue-to-date minus Cost-to-date).

In the event that the project forecasts a loss (at completion), the loss must be recognised in full in the income statement.

Recognized Revenue versus Earned Income

The "recognized revenue" value

generated by finance formula is not to be confused with another essential revenue value generated by Project Controls/ Management; the so called Earned Revenue or Earned Income.

For Reimbursable projects both the Recognized Revenue and Earned Income values are identical.

When executing a Lump Sum project there is a significant difference.

The Earned Income calculation rule looks exactly the same as the Finance Recognized Revenue calculation-rule, ($\% \text{ Complete} \times \text{Contract Value}$), however the % Complete is based on physical progress (Earned Value), and has no relation to the cost incurred on the project.

They also serve a different purpose; Earned Income value is used for invoice management (Unbilled Earned Income), while the Recognized Revenue value is used to compute the WIP (Work In Progress).

Chapter 6.0 will explain the differences between UEI and WIP in greater detail.

"Don't ever
take a fence
down until
you know
why it was
put up"
~ / ~

Robert Frost

4.0 TAXATION

Service and Corporate Tax

In principle, all corporate taxes (which will vary from country to country) and service taxes such as GST are to be taken outside the project.

With-holding Tax

With-holding Tax is an amount withheld by the party making payment to a party outside the country and paid to the Inland Revenue Department of that country.

With-holding Tax can be applicable in situations where WP personnel is seconded to external clients outside the country of establishment or through IEWO agreement with other WP entities.

When providing services to party's outside the country of establishment, the project manager should check whether there are any With-holding Tax rules and regulations applicable in that country and if so, include this into the selling-rate.

There have been numerous instances where failing to do so has wiped-out entire profit margins!

Permanent Establishment risk

A permanent establishment may be defined as a fixed place of business through which activities of an organization are wholly or partially carried on.

In the event of secondment of personnel to a



country where there is no presence, can be exposed to Permanent Establishment risk.

Simplified, the duration of the secondment should not exceed the maximum period applicable in that particular country (can vary per country), otherwise the Inland Revenue department of that country will treat as if it established a permanent business in that country.

Project Managers should contact the location finance department or WP taxation department in Sydney for advice on the inter company taxation exposure on any given project.

Further, they should also request advice on the potential exposure with respect to the "Permanent Establishment" risks associated with the placement of project personnel in a given location, as any potential costs generated from these project activities will be considered project costs.

“Intaxication: euphoria at getting a tax rebate until you realize it was your own money to start with ”
~ / ~
Washington Post

5.0 FOREIGN EXCHANGE EXPOSURE



Projects can be exposed to foreign exchange risks due to:

- a difference between Project Revenue-currency (contract value) and Project Cost currency (expenditure)
- large portions of subcontracted work scopes in a currency that is different from the Project Cost currency

The WPMP dictates that, the project / proposal manager should contact in the first in-

stance WP treasury in Sydney via their Finance department.

In the case where Treasury agree to manage the project FOREX exposure, the project will treat all exchange rates as fixed at the rates at project initiation (so called "Project Rate"), and reports will be based on these rates for the duration of the project.

Should Treasury decline to manage the FOREX, (e.g. because the exposure amount does not meet the minimum criteria set by Treasury), then the project manager and Business Unit General Manager/ Location Manager should agree on the measures to be taken at a location level to manage the risk (e.g. hedging) or it can

accept the FOREX risk as a potential project cost.

In this event, project reporting will be based on a fixed rate (which is the exchange-rate at the contract award date), and the FOREX pain or gain should be reflected as a cost line-item in the cost report.

To illustrate this, see below an example of a project where the contract value is in US \$ and the cost is managed in Malaysian Ringgit.

In any event, it is acknowledged that managing currency fluctuations is outside the control of the Project Manager and that the impact (pain or gain) of FOREX fluctuations should be taken outside their P & L targets at project completion.

Project X ("As-sold" values)		Project X (Status)	
Contract Value (USD)	\$ 2.0M	Physical Progress	60%
Contract Value (MYR)	7.0M (1USD = 3.5 MYR)	Cost-To-Date (MYR)	3.8M
Control Budget (MYR)	6.2M	EAC (MYR)	6.2M
Target Profit (MYR)	0.8M	Invoiced-To-Date (USD)	\$ 1.2M



Finance Report : Day rate

Finance	(USD)	(Day-rate)	(MYR)
Invoice 1 (25% Progress)	\$ 0.5M	(1USD = 3.55 MYR)	= 1.775M
Invoice 2 (15% Progress)	\$ 0.3M	(1USD = 3.48 MYR)	= 1.044M
Invoice 3 (20% Progress)	\$ 0.4M	(1USD = 3.42 MYR)	= 1.368M
Total Invoiced	\$ 1.2M		= 4.187M
Profit-to-date (MYR)		4.187M – 3.8M = 0.387M (Total "Day-rate" revenue - Cost-to-date)	



PCS: Fixed project rate applied for Revenue, Forex as Cost item

Projects (PCS)	(USD)	(Fixed Project Rate)	(MYR)
Total Invoiced	\$ 1.2M	(1USD = 3.5)	= 4.2M
Forex Cost (MYR)		(4.2M – 4.187M)	= 0.013M
Profit-to-date (MYR)		4.2M – 3.8M – 0.013M = 0.387M ("Project rate" revenue – Cost – Forex Cost)	

6.0 BILLINGS AND COLLECTIONS

“Cash” is king

It is imperative that the Billings/Invoices are signed off by the project manager in a timely manner and submitted to the client on the due date.

This will enable the client to make payments on the due date and improve the cash flow position of the project.

If issues arise, these should be taken up by the relevant Project Manager and cleared urgently.

In addition, any debts outstanding for over three months must be highlighted by Finance to the Project Manager for urgent action.

In the first instance the monthly invoice generated for billing the client must be prepared in accordance with the contractual requirements, reviewed by the project manager and then be submitted to the client.

Generation of the draft invoice and draft invoice backup is the responsibility of project controls, under project manager instruction.

This draft invoice should then be manually signed off by the project manager, before being released to AR (Account Receivables).

Projects provide the back up for the invoice. Finance (AR) is responsible for generation of the invoice coversheet, provide additional contractual required back-ups (if applicable) and issue of the invoice to the customer.

Time-line and procedures (including approval signatures) surrounding month-end invoicing will have to be agreed (and

documented) between Project Services and Finance in each location.

The collections of funds is as critical as the invoicing process, and therefore it is required that the finance department contact the client (finance department) one week prior to the payment due date to ascertain whether there are any issues regarding timely payment.

If so, the project manager will be notified and it will be his responsibility to take up the issues with his counterpart and resolve them.

If any amendments need to be made to the invoices or if there is a requirement for creating a provision for bad debt, Finance has to inform the project manager.

The policy on collections/doubtful debts is captured in Finance Policy No. 2-0006, which can be accessed via the Global Finance Website under the Finance & Administration link on the NOW page.

Invoice status and ageing reports should be made available to Project Controls with in GBS or alternate Finance system.

The Invoice and Payment Received Values should be exclusive of Service Tax.

WIP management

WIP (Work In Progress) is the value of the unbilled work performed and is calculated as follows:

For Lump Sum (LS) Projects: **“Revenue To-Date” minus “Invoiced-To-Date”**, where “Invoiced-to-date” is the sum of all the invoices for a particular



project.

For Reimbursable (RE) or Reimbursable with CAP (RC) or Secondment (S) type of Projects the WIP is calculated as: **Total Sell Value-to-date (charged man-hours + non-labours) minus Invoiced-to-date.**

In Chapter 3.0 Revenue Recognition; it was mentioned that there are two different values that could be classified as “Revenue-To-Date”; “Recognized Revenue” and “Earned Income”.

The Finance WIP value is a cost based calculation that returns a conservative revenue value for work that is already done, but not yet invoiced to the client. Finance calculates the revenue-to-date by adding the WIP value to the total invoice value-to-date. Generating the WIP is a Finance responsibility.

The Unbilled Earned Income value is the “client recognized” revenue value of work that is already done, but not yet invoiced to the client. The UEI value is used as an Project Management indicator to determine if there is a billing backlog. Generating the Earned Income value is a Project Controls function.

“The fewer the facts, the stronger the opinion ”
~ / ~
Arnold H Glasgow

To avoid confusion, it was agreed to maintain the term "WIP" for the Finance based WIP, and introduce the term "Unbilled Earned Income" as the indicator for project Billing management purposes.

Subsequently, the Finance WIP is now calculated as follows:

"Recognized Revenue to-

date" minus "Invoiced-to-date".

The Unbilled Earned Income value is derived through the following calculation:

"Earned Income-to-date" minus "Invoiced-to-date".

For Reimbursable (RE), Reimbursable with CAP (RC) or Sec-

ondment (S) type of Projects the WIP is equal to the Unbilled Earned Income.

For Lump Sum projects both values can differ significantly.

See below an example to illustrate the differences between the Finance WIP and the Projects' UEI on a Lump Sum project:

Project X ("As-sold" values)		Project X (Status)	
Contract Value	\$ 2.0M	Physical Progress	60%
Control Budget	\$ 1.6M	Cost-To-Date	\$ 0.8M
Target Profit	\$ 0.4M	EAC	\$ 1.6M
		Invoiced	\$ 1.1M

Recognized Revenue-To-Date & WIP Calculation used by Finance.

Cost-based Progress	50%	(Cost-To-Date / EAC) x 100%
Revenue-To-Date	\$ 1.0M	(50% x \$ 2.0M >>> Cost Based Progress x Contract Value)
Profit-To-Date	\$ 0.2M	(\$ 1.0M - \$ 0.8M >>> Revenue-to-date minus Cost-to-date)
WIP	\$ - 0.1M	(\$ 1.0M - \$ 1.1M >>> Revenue-to-date minus Invoiced-to-date)

Conservative Revenue recognition Finance: \$ 1.0M: (Invoiced-to-date + WIP = \$ 1.1M + \$ -0.1M)

Conservative P&L recognition Finance: (50% of the target profit recognized at 60% completion)

Distorted indicator for project billing management. (negative WIP implies that the client is over billed by \$0.1M)

Earned Income -To-Date & UEI Calculation used by Projects.

Physical Progress	60%	(client approved progress from Progress Measurement System)
Earned Income-To-Date	\$ 1.2M	(60% x \$ 2.0M >>> Physical Progress x Contract Value)
Profit-To-Date	\$ 0.4M	(\$ 1.2M - \$ 0.8M >>> Earned Income-to-date minus Cost-to-date)
Unbilled Earned Income	\$ 0.1M	(\$ 1.2M - \$ 1.1M >>> Earned Income-to-date minus Invoiced-to-date)

Over-recognition Profit-to-date (target profit amount already recognized in full at 60% completion)

Correct indicator for project billing management (project has an invoice backlog of \$ 0.1M)



7.0 REPORTING



The monthly project finance reports will be generated from GBS (or alternative Finance system), while the Project Performance reports are generated by Project Controls as per EMS/ WPMP prescribed PCS excel format or from the internal Performance system ProComs (AME region only).

The Finance reports must be reconciled with the PCS report issued by the project controls function to ensure alignment between Finance and Project Controls numbers.

This reconciliation between Project Controls and Finance needs to be done on a monthly basis prior to the Commercial Review Meeting.

The key-objectives of this reconciliation-exercise are:

- To cross-check the To-date values (trend) against the 'At-Completion' forecasts.
- To filter, analyse and correct all discrepancies

All project reports must be signed off by the project manager.

ager.

As mentioned in Chapter 1.0, the platform to review the commercial status of the projects is the Monthly Commercial Review meeting.

The Commercial Review Process evolves around the following reports:

Project Controls Statement

The Project Controls Statement or Summary (PCS) is based on the actual performance of the project at cut-off date for the project manager to check the commercial health of the project in terms of P/L forecast-at-Completion, Cash flow (Invoices Received & Paid), UEI and Debtor-day management, Approved / Outstanding Variations, Subcontract performance management etc.

The PCS will be generated by the Project Controller, but the Report is owned by the Project Manager.

The PCS that is reviewed during the Monthly Commercial Review meeting requires the

approval signatures of the Project Manager (Project status and P/L), Project Controller (verification At-Completion numbers) and Finance Manager (verification Actuals-to-date numbers).

An example of a standard PCS Excel template is contained in Attachment A.

Note: To drive consistency in format, methodology and terminology, and to enable consolidation of project performance across entities, the AME region (Asia / Middle East) mandated the use of an internal commercial performance system called ProComs for all its entities. Subsequently, all PCS reports in AME should be generated out of ProComs. The ProComs PCS has its own unique format, but also offers the option to generate the PCS in the "EMS" prescribed Excel format.

An example of a ProComs report is contained in Attachment B

Project Cost Data

The Finance department is expected to provide the actuals-to-date data for both Month-end and Financial Year-to-date periods as well as for the Project Inception period (project-to-date across Financial Years) to Project Controls for input into the PCS:

As a minimum, the data provided from Finance should contain actuals for cost, billing, receipts, expenditures and profit/loss results per project.

Project Controls utilizes this data to:

- update the Labour & Non-Labour cost

"In case of doubt, make it sound convincing"
~/~
George W. Bush



- Investigate in detail cost components

Attachment C shows an example of a Project Cost Report generated by GBS.

Monthly Traffic Light Report (MPRD)

The Traffic Light Report or Monthly Project Review Document (MPRD) focuses mainly on the technical aspects of the Project and as such allows for the flexibility to hold separate Technical Review Meetings as required. The MPRD contains only a high level commercial status.

The Traffic Light Report is mandated for all Project managers and, contrary to popular belief, is not a Project Controls but a Project Managers' responsibility.

A Template Traffic Light Report can be found in Attachment D.

Consolidated Project Performance Summary (AME only)

The Consolidated Project Performance Summary gives the

bottom line commercial status of all ongoing projects within a company's AME entity.

The projects are to remain on the summary list until the project is fully invoiced and payments are settled. The Consolidated Project Performance Summary is generated out of ProComs and is a key deliverable for the Monthly Commercial Review meetings in the AME region. It is also utilized by Finance for Revenue Recognition calculations for Lump Sum projects.

An example of the Consolidated Project Performance Summary can be found in Attachment E.

Project Invoice Status Report

Project Controls is utilizing this report to update the Invoice/Payment section in the Project Performance Reports. The report indicates Project number, invoice number, the invoice date, the invoice-value excluding service tax, total invoice value and outstanding payment.

Example of a GBS Project Invoice Status Report can be found in Attachment F.

Accounts Receivable Invoice Reports

The Billing/Debtor Status Overview is a Finance deliverable to Project Services. The report indicates Project number, invoice number, the invoice date, the invoice-value excluding service tax, total invoice value, outstanding payment and the age of any unpaid invoices.

Example of a GBS Accounts Receivable Invoicing Reports can be found in Attachment G.

Sub Contract Accrual Report

Project Controls is responsible for providing Sub Contract Accrual data to Finance. Finance is utilizing this to accrue the LS subcontract cost in their PJC.

The Project Controls department is required to provide Finance with list or report of all sub-contracts, categorized by Project number. As a minimum, the information should contain % Complete, as well as the Current approved Sub contract value of each contract.

A ProComs Sub Contract Accrual Report Overview can be found in Attachment H.

Required Reports	System	Data Ownership
Project Controls Statement (PCS)	PCS excel template or ProComs (AME region only)	Project Controls
Project Cost Report	GBS or alternate Finance System	Finance
Monthly Traffic Light Report	Word Template	Project Management
Consolidated Project Performance Summary (AME region only)	ProComs (AME)	Project Controls
Optional Reports	System	By
Project Invoice Status Report	GBS or alternate Finance System	Finance
Accounts Receivable Invoice Reports	GBS or alternate Finance System	Finance
Sub Contract Accrual Report	Project Controls excel template or ProComs (AME region only)	Project Controls

8.0 COMMERCIAL PROJECT REVIEWS



The Monthly Commercial Project Review process was introduced and implemented in 2015 to ensure a continuous monitoring, analysis and improvement process for the projects' commercial performance.

Key-objectives of the Commercial Project Review:

- Increase Project profitability
- Improve Schedule Performance
- Reduce average debtor-days
- Reduce change/variation turnaround period

Ultimately the CPR-process will result in:

- Increased commercial awareness of Project managers and Project teams (commercial ownership)
- Improved commercial performance of the projects and entity's

The Commercial Review Process should be in line with the practices outlined in EMS/

WPMP (PMP-0035 - Procedure for Monthly Project Reviews), and can be accessed via the following links:

The Commercial review meetings usually are attended by:

- CSG-Manager (when a Multi CSG-office)
- Finance Manager
- Location Manager of Project Controls/Services
- Location Manager of Projects
- The Project Managers and Project Controllers of the reviewed projects.

The PCS and MPRD will be subject to a commercial analysis during the Monthly Project Commercial Review Meeting.

The attendees will be provided with:

- One Consolidated Project Performance List (AME only)

- Minutes and agreed actions of previous Commercial Review Meeting

The Project Manager / Project Controller will provide the attendees of the Commercial Review Meeting with:

1. the PCS
 2. the Traffic-Light Report
- for their respective projects.

The Finance Manager will provide the Finance Summary Statements to back-up the "To-Date" numbers in the PCS.

Key Topics

In essence the following commercial topics will be subject for review/discussion during the Monthly Commercial Review Meeting:

- Planned Achievement - *What is planned?*
- Actual Achievement - *What is done? (including sub-contract performance)*
- Expenditure - *What was expended to achieve this?*
- Revenue - *What is the current Contract Value? (incl. approved variances)*
- Profit/Loss - *Are we meeting our profit-target?*
- UEI Management - *Are we invoicing?*
- Cash flow - *Are we getting paid?*
- Profit Recognition - *Is the recognized Profit-to-date in line with the forecasted Profit-at-completion?*

“A good scare is worth more than good advice”
~ / ~
E.W Howe

Overall Internal Project Controls Procedures

It will be the responsibility of the Project Controls department to ensure that a consistent and methodical information flow process across functional departments and projects is adopted.

In order to achieve this, the individual Project Controls departments will have to develop an overall procedure for Internal Cost and Schedule Control which will address both methodology and tools utilised.

An example of such procedure is contained in Attachment J.

Control Budget

The internal Control Budget provides the Project Manager and Corporate Management with a challenging, but achievable commercial target.

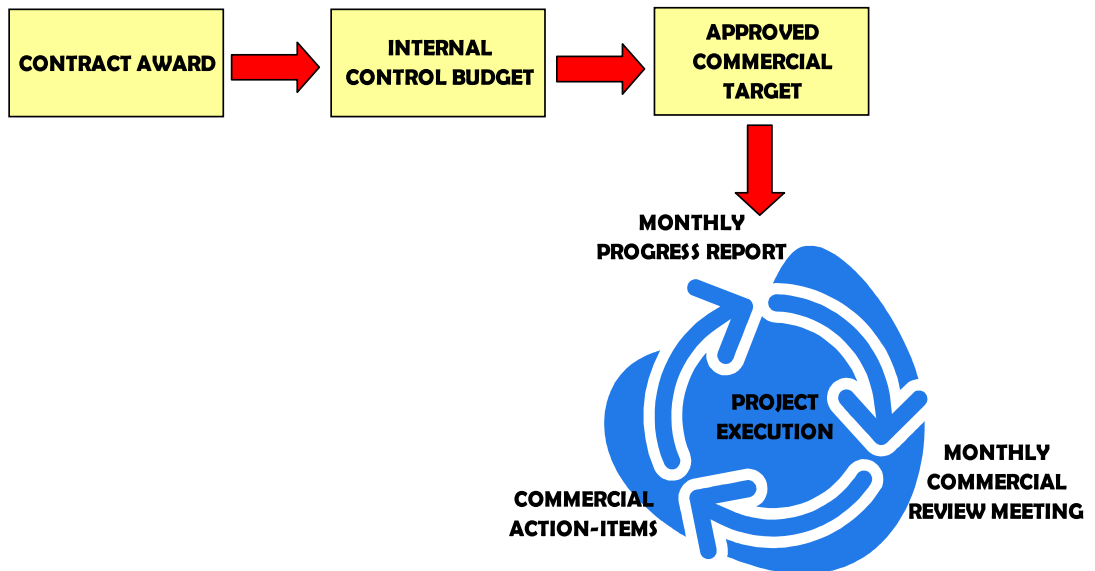
It is prepared at the project initiation-stage of the project and contains a detailed calculation of the Project Contract Value, Budget Cost and Target Profit.

Developing this Control Budget is the responsibility of the Project Controller but its development will require input and buy-in of all internal stake-holders.

The Control Budget requires an approval sign-off from the Project Manager (on behalf of the Project Team), the location MOP, the location Manager of Project Controls, and either the Business Unit Manager or Entity Manager of Operations , before it is recognised as the Project Commercial Target.

Sign-off on the Control Budget effectively means a commitment from the Project Team to deliver the target commercial outcome.

Below is an outline of the proposed CSG Commercial Project Review Process:



Summary

In closing, find below some rules and guidelines regarding internal Project Performance Management & Reporting:

- To encourage commonality in tools, terminology and methods, all internal Project Performance Reports subject to Monthly Commercial Review will be generated in either the **PCS format** for major & minor projects provided in EMS/ WPMP or out of the Internal Project Performance tool **ProComs** (AME only).
- The PCS is based on approved **Baseline Control Budget** (Target) established for the Project (approval by CSGM/MOP/PM/PC)
- “To-Date”-Input to the PCS is based on **actual project data** provided from GBS or alternative Finance system, and does not recognize inter-CSG margins. (project view rather than CSG view)

- The PCS indicates **Project Commercial Performance** based on “At-Completion” forecasted numbers as opposed to Project and/or Financial Year-to-date numbers (which is Finance Status reporting).
- All Lump Sum (LS) Projects should consider **Contingency** for “unknown unknown’s” established within Baseline Control Budget, agreed at Project managers’ and CSG managers’ level.
- In principle, cost overruns for Lump Sum projects will draw-down first on contingency before “eating” into the forecasted At-completion profit.
- Cost under runs for Lump Sum projects will be allocated as additional contingency before reporting an increased At-Completion profit forecast.
- Releasing Contingency into profit is a Project manage-

ment decision. Upon reaching to 70% Project Completion mark, the Monthly Commercial Review forum can (co-) decide on the release of Contingency into profit.

- Decisions on releasing Contingency and allocation of provisions can only be made during the Monthly Commercial Review meeting.
- “Total cost to date” should always include cost accruals (subcontracts, LS IEWO’s etc) when calculating the Revenue-to-date.
- “Forecast cost at completion” should always include contingency (if any) when calculating the Revenue-to-date, to ensure that Finance does not automatically accrue project contingency as revenue into the books.
- Actual Non-Labour Expenditure is provided from GBS, or alternative Finance system on a monthly basis. The non-labour cost will be the Totals-to-date based and should be categorized in the required Non-labour categories & Cost types.
- It is allowed to input only the non-labour Total-to-date values in the PCS. However, when opted for a “bottom-line” entry, a detail non-labour breakdown is available from GBS or alternative Finance system in the event that a more detailed review is required.

“It’s not a lie,
it’s a gift for
fiction ”
~ / ~
Walt Price



9.0 EXERCISES - QUESTIONNAIRES

9.0 COMMERCIAL PERFORMANCE MANAGEMENT - TRAINING EXERCISES

9.01 Measure of commercial success for projects is based on

- a) Delivering the commercial targets
- b) Project Profitability
- a) and b) are both correct

9.02 Employee X has a gross annual salary of US \$70,000 based on a gross working year of 2080 hours. His payroll Burden was determined as the tables below.

Entitlement Holiday & Sickness Days

	Days	hrs	%
Annual Holidays	15	120	5.76
Statutory Holidays	5	40	1.92
Sickness Days	10	80	3.84
Sum	30	240	11.52

Payroll Burden Cost Elements

PB Cost Elements	%
Superannuation/Provident Fund	7.0
Employers liability insurance	1.0
Personal Accident	1.5
Medical insurance	1.0
Allowances	0.5
Life Insurance	5.0
Sum	16.0

seconds this employee at a sell-rate of US \$ 55.00. The Gross Profit for this secondment will be:

- US \$ 15.97 per hour
- US \$ 12.09 per hour
- US \$ 10.88 per hour**

9.03 If the total overhead recovery (Operational and Non-Operational) was fixed at US \$ 12.00 per charged man hour, would you still second this employee?

- Probably, even though it's not exactly the Jackpot, we'll still make \$ 3.97 per hour (~ 7%)
- No, this secondment deal is almost at cost!
- No, because we will lose money on every hour charged.

9.0 COMMERCIAL PERFORMANCE MANAGEMENT - TRAINING EXERCISES

9.04 Project "Z" has a Lump Sum value of \$ 1.1M.

The expenditure-to-date at cut-off date is \$ 422,000, the forecasted Cost-at-Completion is \$800,000. On top of that, there was still \$ 150K left in contingency.

In the Commercial Review Meeting it was decided to release \$ 50K of the contingency into profit. What would be the new Recognized Revenue according the Finance calculation-rules?

- \$ 488,620 ($422K / 950K = 44.42\% \times \$1.1M$)
- \$ 515,680 ($422K / 900K = 46.88\% \times \$1.1M$)
- \$ 546,150 ($422K / 850K = 49.65\% \times \$1.1M$)

9.05 The physical progress for the same Project "Z" is 45% Complete. To date \$ 425K have been invoiced. When comparing the WIP and the Unbilled Earned Income values for this example, you'll find that

- The WIP value is higher than the UEI value
- The WIP value is lower than the UEI value
- The WIP value and the UEI value are the same

9.06 The cost-to-date for a reimbursable project in the Brisbane office was reported at \$ 840K.

Included in this number were the cost accruals for 5 IEWO staff from the Perth office.

The accrual was based on manhour charged x their IEWO rate, and the total recognized cost for the IEWO staff totaled \$ 60,000.

The hours were captured via direct time bookings to the Brisbane project via GBS.

The Brisbane office recently received a \$45,000 invoice from Perth for the services provided by their IEWO staff. Based on this information, the cost-to-date for this project

- Is still \$ 840K, because the IEWO cost was already accrued via man hour bookings. The invoiced amount will be booked to a clearing account to avoid 'double-dipping'
- should be adjusted to S 825K by reversing the accrued \$ 60K and replacing it with the actual invoice value of \$ 45K.
- Both practices are acceptable

9.07 A Lump Sum subcontractor claims 35% physical progress on a contract value of \$50K.

The Lump Sum Payment agreement for this subcontract was based on Progress Milestones.

At project commencement, this subcontractor has invoiced \$ 15K for achieving Milestone 1 - Project Kick-off.

What cost should the project controller recognize for this subcontract?

- \$ 15,000 (the invoiced amount)
- \$ 17,500 (35% of \$ 50K)
- \$ 32,500 (Milestone 1 + Progress accrual)

10.0 EXERCISES - PCS

BACKGROUND

Creer Oil Company (CROC) is the operator of the Gas to Power development located in South East Asia. The development is based on the Apache gas fields. Gas is delivered from the Apache 'A' Platform via a 377 km marine pipeline to the Sioux Terminal for processing prior to onward transmission to the Cheyenne Power station. (see Figure 1.1).

Production commenced from the Apache Platform in December 2002. Original design

throughput was 356 MMscfd.

In response to sustain higher demand, a compression module shall be designed to handle an increase in processing capacity from 356 MMscfd to 530 MMscfd.

A provision was made in the original platform design for the addition of a compression module to boost gas pressure to the required pipeline pressure. It was envisaged that compression would not be required until 2012, when the reservoir pressure was predicted to fall below that re-

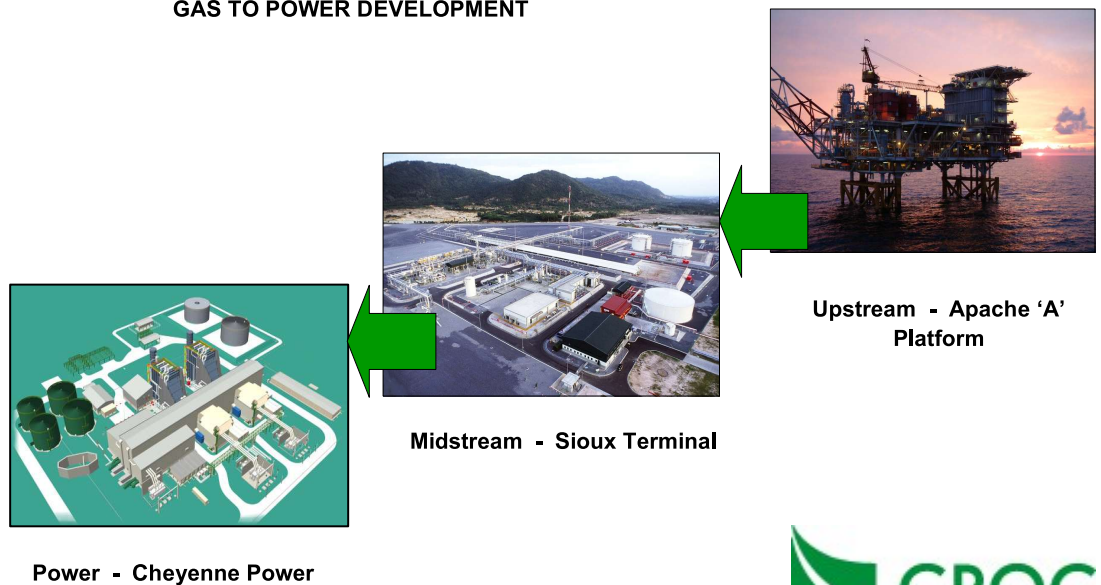
quired for design export gas flow rate.

The start up date for the compression facilities is currently targeted for 26 Aug 2012.

The FEED for the compression project commenced on 19 Sep 2010, and is scheduled to complete on 25 Dec 2010.

The execution-phase is scheduled to commence on Jan 1, 2011

GAS TO POWER DEVELOPMENT



Internal Commercial Performance

MAIN EXECUTION CONTRACTS

In an effort to meet aggressive target completion dates CROC have decided to execute the project using a combination of the following execution contracts:

- Single EPCM Contractor
- Single Accommodation Vessel Contract
- Single Module Fabrication Contract
- Single Transport & Installation Contract
- Single Brown Field Modification / Shut Down Tie-Ins / HUC Contractor

The contract strategy is based on all Procurement to be done by EPCM contractor and free-issued to the respective contractors.

EPCM CONTRACT

have been awarded the EPCM Contract and as such, responsible to deliver the full EPC on time and under budget.

The EPCM contract covers services for Engineering, Procurement, and Construction Management, and includes the following scope of work:

- Detail Design of Module
- Detail Design of Brownfield and Tie-in works
- Follow-on engineering, Construction support
- Procurement services of all equipment and material (issue RFQ's, Technical & Commercial Bid Evaluations, Award Recommendations to CROC and prepare P.O on behalf of CROC)
- Vendor inspection and expediting for materials and equipment (ROS-dates and VDR).
- Provision of full EPC Management (fabrication, installation and commissioning

management, contract admin.)

A set of EPCM Control Accounts were developed by in the FEED-phase and approved by CROC prior to the start of the Execute phase. A detail breakdown of the EPCM manhour Control Accounts are provided on page 32 and 33.

The contract will be on a Cost Plus (reimbursable) basis. The following All-In Man hour-rates were agreed between CROC and ' per designation:

CATEGORY A	CATEGORY B	CATEGORY C	CATEGORY D	CATEGORY E	CATEGORY F
USD 77.00	USD 60.00	USD 41.00	USD 35.00	USD 22.00	USD 14.00
Project Mngr	Project Serv. Mngr	Materials Superv'r	Designer	Planner	Doc. Controller
Constr. Mngr	Procurement Mngr	Contract Admin.	Engineer	Cost Engineer	Project Secretary
Commiss. Mngr	Contracts Mngr	Commiss'ng.Engr	PDMS Admin.	QC Inspector	
	HSE Mngr	Senior Engineer		QC Coordinator	
	Site Rep/Super Int.	Senior Buyer		CAD Draftsman	
	Project Engineer	Senior Expeditor			
	Lead Engineer	Senior Cost Engir			
		Senior Planner			
		Lead Designer			

Lump Sum (Fixed Fee)

agreed to execute the above detail engineering scope on cost reimbursable basis.

The Schedule of Rates (selling rates) were based on average Salary & PB rates and therefore exclude overhead recovery and profit margins.

CROC agreed to a Lump Sum (Fixed Fees) of USD 3,177,822 as compensation for the projects' overhead recovery and profit margin.

Milestone	Milestone Event	%	Sum Due
1	PO Award Structural Steel, Suction Scrubber, Air Cooler	10%	\$317,782.20
2	Issue ITT Fabrication; Transport & Installation	10%	\$317,782.20
3	Award Fabrication; Transport & Installation	40%	\$1,271,128.80
4	Delivered on Site Compressor/ Turbine	10%	\$317,782.20
5	Module Load-out	10%	\$317,782.20
6	Start Hook-up and Commissioning	5%	\$158,891.10
7	Start-up Apache Compression Module	10%	\$317,782.20
8	Completion EPCm Contract	5%	\$158,891.10
	Total Lump Sum EPCM	100%	\$3,177,822.00

Provisional Sums

In addition to the Engineering Fees and the Lump Sum Fixed Fees, CROC allowed a provisional Sum of \$250,000 in the contract to cover for cost such as project travel and HSE reward bonuses for the Contractors. The breakdown of the provisional sum is as follows:

Provisional Sum Description	Amount (USD)
Business Travel	\$150,000
HSE Incentive Scheme	\$100,000
TOTAL Provisional Sum	\$250,000

Third Party

WP expects to utilize 3rd party contractors/ consultants for EIA (Environmental Impact Assessment), HAZOP- (Hazard and Operability) and HAZID (Hazard Identification) studies.

These 3rd party cost are reimbursable by EPCM Contractor to CROC at actual cost plus zero%.

Scope	Sub Consultant / Contractor	Amount (USD)
EIA	Gobi International Ltd	\$100,000
HAZOP	Looi Risk Management	\$ 65,000
HAZID	Yong Group OH & S	\$ 65,000
TOTAL Sub Contractor Cost		\$ 230,000

APPROVED EPCM BUDGET-CAPS

CONTROL ACCOUNT	DESCRIPTION	BUDGET		MANHOUR TOTALS PER CATEGORY					
		USD	MANHOURS	A	B	C	D	E	F

MANAGEMENT & SUPPORT

1-01-PMA-01	Project Management & Support (EPCM)	\$ 344,147.00	7,580	3,335	607							3,638
1-01-PMA-02	QA/QC Management & Support	\$ 130,910.00	3,078		1,663							1,415
1-01-PMA-03	Engineering Management & Support	\$ 38,827.00	947				947					
1-01-PMA-04	HSE Management & Support	\$ 40,594.00	947		520						427	
1-01-PMA-05	HAZOP Engineering	\$ 190,078.00	4,262	426			3,836					
1-01-PMA-06	Project Management & Plan	\$ 80,542.00	1,894		1,023						871	
1-01-PMA-07	Follow-on Engineering Support	\$ 50,770.00	1,183	225			651				307	
1-01-PMA-08	As-Building	\$ 170,685.00	3,788	947			1,856				985	
	Management & Support Total	\$ 1,046,553.00	23,679	4,933	3,813	7,290		4,005				3,638

PROCUREMENT MANAGEMENT & SUPPORT

1-01-PMB-01	Procurement Management & Support	\$ 204,715.00	4,069		1,994					2,075		
1-01-PMB-02	Purchasing	\$ 343,926.00	6,836		3,350					3,486		
1-01-PMB-03	Expediting	\$ 238,821.00	4,747		2,326					2,421		
1-01-PMB-04	Inspection	\$ 110,237.00	2,191		1,074					1,117		
1-01-PMB-05	Contract Management	\$ 225,471.00	4,382		2,411					1,971		
	Procur. Management & Support Total	\$ 1,123,170.00	22,225		11,155					11,070		

CONSTRUCTION MANAGEMENT & SUPPORT

1-01-PMC-01	Construction Management & Support	\$ 1,255,229.00	22,096	7,953	3,315					10,828		
	Constr. Management & Support Total	\$ 1,255,229.00	22,096	7,953	3,315					10,828		

COMMISSIONING MANAGEMENT & SUPPORT

1-01-PMD-01	Commissioning Management & Support	\$ 117,572.00	1,900	1,102						798		
	Commiss. Management & Support Total	\$ 117,572.00	1,900	1,102	0					798		

APPROVED EPCM BUDGET-CAPS

CONTROL	ACCOUNT	DESCRIPTION	BUDGET		MANHOUR TOTALS PER CATEGORY					
			USD	MANHOURS	A	B	C	D	E	F
					\$77.00	\$60.00	\$41.00	\$35.00	\$22.00	\$14.00

MODULE DETAIL DESIGN

1-03-EDA-01	Process Detailed Design	\$ 39,976.00	950	275	285	247	143
1-03-EDA-02	Structural Detailed Design	\$ 79,990.00	1,900	551	570	494	285
1-03-EDA-03	Mechanical Detailed Design	\$ 72,000.00	1,710	496	513	445	256
1-03-EDA-04	Piping Detailed Design	\$ 247,960.00	5,890	1,708	1,767	1,531	884
1-03-EDA-05	Electrical Detailed Design	\$ 87,980.00	2,090	606	627	543	314
1-03-EDA-06	Instrument Detailed Design	\$ 199,956.00	4,750	1,377	1,425	1,235	713
1-03-EDA-07	Safety & Risk Detailed Design	\$ 71,962.00	1,710	495	513	445	257
	Module Detail Design Total	\$ 799,824.00	19,000	5,508	5,700	4,940	2,852

BROWNFIELD MODIFICATIONS / TIE-IN DESIGN

1-03-EDB-01	Brownfield - Process Detailed Design	\$ 21,322.00	506	147	152	132	75
1-03-EDB-02	Brownfield - Structural Detailed Design	\$ 19,356.00	460	133	138	120	69
1-03-EDB-03	Brownfield - Mechanical Detailed Design	\$ 21,344.00	507	147	152	132	76
1-03-EDB-04	Brownfield - Piping Detailed Design	\$ 50,321.00	1,195	347	358	311	179
1-03-EDB-05	Brownfield - Electrical Detailed Design	\$ 25,184.00	598	174	179	155	90
1-03-EDB-06	Brownfield - Instrument Detailed Design	\$ 38,737.00	920	267	276	239	138
1-03-EDB-07	Brownfield - Safety & Risk Detailed Design	\$ 17,428.00	414	120	124	108	62
	Brown Field Mods / Tie-In Design Total	\$ 193,692.00	4,600	1,335	1,379	1,197	689

OVERALL COST BUDGET

		\$ 4,536,040.00	93,500	13,988	25,126	37,065	6,137	7,546	3,638
--	--	-----------------	--------	--------	--------	--------	-------	-------	-------

CONTROL BUDGET

The internal Control Budget provides the Project Manager and Corporate Management with a realistic, but challenging commercial target.

It is prepared at the kick-off stage of the project and contains a detailed calculation of the Project Contract Value, Budget Cost and Target Profit.

Developing this Control Budget is the responsibility of the Project Controller, and needs the input and buy-in of all internal stake-holders.

The Control Budget requires an approval sign-off from the Project Manager, the Project Services Manager, the Manager of Projects and the General Manager, before it is recognized as the Project Com-

mercial Target.

Sign-off on the Control Budget effectively means a commitment from the Project Team to deliver the target commercial objectives.

The following cost data was made available to the Project Controller:

Labour Cost

The WP Project Controller identified the Project Team members, allocated the cost-rates and estimated hours, and compiled the Estimate sheet for the EPCM Man hour-cost. For details see page 35 –36.

Please note that the manhour Cost budgets provided are inclusive of Operational & Non Operational Overheads. The Overhead recovery-rate for this entity is US\$ 10 per charged man hour.

Non Labour Cost

Printing / Reproduction	For Cost purposes, it was agreed to charge the project US \$ 0.50 per booked man hour for all project related printing. Printing/Repro is covered under the Lump Sum Fixed Fee, and therefore non-reimbursable
Travel Expenses	Project related travel cost is reimbursed by CROC at cost with no mark-up. Compensation for Handling-cost is covered under the Lump Sum Fixed Fee. The Travel budget is capped at US \$ 150,000 as indicated in the Provisional Sums.
Computing / IT Support	US \$ 0.25 per booked man hour is charged to the project for IT usage and support. Computing is covered in the Lump Sum Fixed Fee, and therefore non-reimbursable to CROC
Office / Communication	The cost for office-space for the EPCM project team is included in the individual cost-rates. Project team office space is covered under the Lump Sum Fixed Fee and therefore non-reimbursable to the client. The clients' offices are charged to the project on a accrual basis (US \$ 2,50 per booked manhour. The same applies to Communication cost (US \$ 0.75 per booked man hour). CROC will have their own communication network connections, and will be billed directly by the Telecommunications Operator.
Other expenses	Personnel Mobilisation, Demobilisation, Visa cost, entertainment cost etc, are all included in the Lump Sum Fixed Fee, and not reimbursable by CROC. Mobilisation / Demobilisation cost is included in the individual cost rate, and therefore non-reimbursable to CROC. All other project expenses are to be charged to the project.

EPCM MANHOURE COST ESTIMATE (INTERNAL)

CONTROL ACCOUNT	DESCRIPTION	BUDGET		MANHOURE TOTALS PER CATEGORY						
		USD	MANHOURE	A	B	C	D	E	F	
MANAGEMENT & SUPPORT										
1-01-PMA-01	Project Management & Support (EPCM)	\$ 293,845	7,580	3,335	607					3,638
1-01-PMA-02	QA/QC Management & Support	\$ 111,776	3,078		1,663				1,415	
1-01-PMA-03	Engineering Management & Support	\$ 33,152	947			947				
1-01-PMA-04	HSE Management & Support	\$ 34,661	947		520				427	
1-01-PMA-05	HAZOP Engineering	\$ 162,296	4,262	426			3,836			
1-01-PMA-06	Project Management & Plan	\$ 68,770	1,894		1,023				871	
1-01-PMA-07	Follow-on Engineering Support	\$ 43,349	1,183	225			651		307	
1-01-PMA-08	As-Building	\$ 145,737	3,788	947			1,856		985	
	Management & Support Total	\$ 893,585	23,679	4,933	3,813	7,290			4,005	3,638
PROCUREMENT MANAGEMENT & SUPPORT										
1-01-PMB-01	Procurement Management & Support	\$ 174,793	4,069		1,994		2,075			
1-01-PMB-02	Purchasing	\$ 293,657	6,836		3,350		3,486			
1-01-PMB-03	Expediting	\$ 203,914	4,747		2,326		2,421			
1-01-PMB-04	Inspection	\$ 94,124	2,191		1,074		1,117			
1-01-PMB-05	Contract Management	\$ 192,515	4,382		2,411		1,971			
	Procur. Mngmnt & Support Total	\$ 959,004	22,225		11,155	11,070				
CONSTRUCTION MANAGEMENT & SUPPORT										
1-01-PMC-01	Construction Management & Support	\$ 1,071,761	22,096	7,953	3,315		10,828			
	Constr. Mngmnt & Support Total	\$ 1,071,761	22,096	7,953	3,315		10,828			
COMMISSIONING MANAGEMENT & SUPPORT										
1-01-PMD-01	Commissioning Management & Support	\$ 100,387	1,900	1,102			798			
	Commiss. Mngmnt & Support Total	\$ 100,387	1,900	1,102	0		798			

NOTE: EPCM MANHOURE BUDGET INCLUDES \$10.00 PER HOUR OVERHEAD RECOVERY

EPCM MANHOUR COST ESTIMATE (INTERNAL)

CONTROL	ACCOUNT	DESCRIPTION	BUDGET		MANHOUR TOTALS PER CATEGORY						
			USD	MANHOURS	A	B	C	D	E	F	
MODULE DETAIL DESIGN											
1-03-EDA-01		Process Detailed Design	\$ 36,286	950		275	285	247	143		
1-03-EDA-02		Structural Detailed Design	\$ 72,606	1,900		551	570	494	285		
1-03-EDA-03		Mechanical Detailed Design	\$ 65,353	1,710		496	513	445	256		
1-03-EDA-04		Piping Detailed Design	\$ 225,069	5,890		1,708	1,767	1,531	884		
1-03-EDA-05		Electrical Detailed Design	\$ 79,858	2,090		606	627	543	314		
1-03-EDA-06		Instrument Detailed Design	\$ 181,497	4,750		1,377	1,425	1,235	713		
1-03-EDA-07		Safety & Risk Detailed Design	\$ 65,337	1,710		495	513	445	257		
		Module Detail Design Total	\$ 726,004	19,000		5,508	5,700	4,940	2,852		

BROWNFIELD MODIFICATIONS / TIE-IN DESIGN

1-03-EDB-01		Brownfield - Process Detailed Design	\$ 19,354	506		147	152	132	75		
1-03-EDB-02		Brownfield - Structural Detailed Design	\$ 17,569	460		133	138	120	69		
1-03-EDB-03		Brownfield - Mechanical Detailed Design	\$ 19,374	507		147	152	132	76		
1-03-EDB-04		Brownfield - Piping Detailed Design	\$ 45,675	1,195		347	358	311	179		
1-03-EDB-05		Brownfield - Electrical Detailed Design	\$ 22,859	598		174	179	155	90		
1-03-EDB-06		Brownfield - Instrument Detailed Design	\$ 35,161	920		267	276	239	138		
1-03-EDB-07		Brownfield - Safety & Risk Detailed Design	\$ 15,819	414		120	124	108	62		
		Brown Field Mods / Tie-In Design Total	\$ 175,811	4,600		1,335	1,379	1,197	689		
OVERALL COST BUDGET			\$ 3,926,534	93,500	13,988	25,126	37,065	6,137	7,546		3,638

NOTE: EPCM MANHOUR BUDGET INCLUDES \$10.00 PER HOUR OVERHEAD RECOVERY

SUB CONTRACT COST

utilizes 3rd party contractors/consultants for

EIA (Environmental Impact Assessment), HAZOP- (Hazard and Operability) and HAZID (Hazard Identification) studies.

These 3rd party cost are reimbursable by EPCM Contractor to CROC at actual cost plus zero %.

Environmental Impact Assessment

WP engaged Chan Environment Int. as their independent EIA (Environmental Impact Assessment) consultant.

Environmental Impact Assessments identify and evaluate the potential impact of the project on the environment, leading to implementation of environmental management measures into the design. Chan Environment will manage environmental

assessments from the early identification of environmental requirements through to the preparation of Reviews of Environmental Factors and Environmental Impact Statements.

The PO has been awarded on June 14, 2011 on Lump Sum basis (PO number PC-PO-901) and the cost can be charged to CROC at actual cost plus zero%.

The PO value was set at US \$ 100,000, and the following Pro-



gress Milestone payments were agreed:

- **Milestone 1 (25%)**
Mobilization
- **Milestone 2 (50%)**
IFC EIA Reports
- **Milestone 3 (25%)**
AFC approval EIA reports



Hazard and Operability Study

On May 12, 2011 Looi Risk Management WP was awarded a Lump Sum Purchase Order (PO No.RQ-05/399) to facilitate and chair the HAZOP workshop.

The objective of the HAZOP is to identify and assess potential process and operational hazards throughout a project life cycle including, evaluating relevant safeguards and making recommendations for improving safety in design.

The PO value was US \$ 65,000 and the following Progress Payment Milestones were agreed:

Milestone 1 (10%) -Define ob-

jectives, and scope of the HAZOP study

Milestone 2 (10%) - HAZOP Workshop preparation

Milestone 3 (60%) - Completion HAZOP Workshop

Milestone 4 (20%) - IFA HAZOP Report.

These 3rd party cost are reimbursable from CROC at actual cost plus zero%.

“It is amazing what can be accomplished when nobody cares who gets the credit”

~/~

Robert Yates

Hazard Identification Study

The main focus in a HAZID (Hazardous Identification) is to identify all hazardous events. WP awarded on May 12, 2011 Yong Group OH&S consultants to conduct a HAZID workshop (PO No.STR-676-90).

The workshop will be a combination of formal presentations, individual and small group dis-

Yong Group OH & S CONSULTANTS

cussions, case studies, experiential interaction and on-site HAZID inspections.

The lump Sum Purchase Order value is US\$ 65,000 and payment is agreed based on the following milestones:

Milestone 1 (25%) - HAZID

Workshop Preparation

Milestone 2 (60%) - Completion HAZID Workshop

Milestone 3 (15%) - AFC approval HAZID report

The cost is reimbursable from CROC at actual cost plus zero%.

10.1 CONTROL BUDGET SET UP

Based on the provided info, put together a Control Budget using ether:

- 1) the format as per attached File PMF-1063 PCS Minor Projects. (AUW, AENZ, USLAC, LAM, EUR, CAN, SSA)
- 2) Internal Performance Management system ProComs (ASCH / MENAI)

10.2 PROGRESS UPDATES

At Cut-off date 24 Nov 2011, the Project Controller receives the project updates (Page 39 - 44).

In addition to this the sub consultants reported the following progress:

- Chan International - 75%
- Looi Risk Management - 100%
- Yong Group - 85%

Below a table showing the 3 Change-requests that were submitted. The status of these variance requests at cut off date:

- **CCNA 003** is approved by CROC
- Approvals for **CCNA 001** and **CCNA 002** are still pending.

The following Fixed Fee payment Milestones have been achieved and invoiced to CROC:

MS 1: Issue ITT Module Fabrication and Transport & Installation Contracts

MS 2: PO Award Structural Steel, Suction Scrubber and Gas Coolers

Milestone MS 3 Award Module Fabrication and Transport & Installation Contracts is achieved as well, but the approved Payment Certificate has not been received yet from CROC.

Update the PCS with the progress & Cost data provided on page 40 - 44 and the above info in either the WPMP/EMS format (ANZ, USLA, EA, CAN) or in the ProComs format (AME)



Request No	Date	Description	Hrs	Charge Value	Budget Value
CCNA001	17-Aug-06	Specification Safety Shower	167	\$ 8,177	\$ 6,542
CCNA002	3-Oct-06	Add. Pipeline Hydraulic Modelling	345	\$ 18,545	\$ 12,981
CNNA003	18-Oct-06	Wave Refraction Study	244	\$ 12,740	\$ 10,829

- Internal Commercial Performance
Rev 0

400100-88888 EPCM CONTRACT - MANHOURS PERFORMANCE

DEVELOPMENT / APACHE COMPRESSION PLATFORM

Control Account	CTR DESCRIPTION	Budget hrs			% Complete				Expenditure (hrs)				Performance						
		Original	Approved	Current	Last Month	This Period	Current	Planned	Last Month	This Period	Current	U/O-run	EAC	ETC	SPI	CPI	EM	HP	R
A	B	C	D	E	F	G	H	I	J	K	L	M=(ExH)	P=(EM)	Q=(L+P)	R=(Q+E)				
1-01-FWA-01	Project Management & Support (EPCM)	7,580		7,580	26.9%	3.1%	30.0%	30.4%	2,040	360	2,400	2,274	5,306	7,706	126				
1-01-FWA-02	QA/QC Management & Support	3,078		3,078	24.7%	10.3%	35.0%	30.3%	761	134	895	1,077	2,001	2,896	-182				
1-01-FWA-03	Engineering Management & Support	947		947	48.9%	6.8%	55.7%	56.2%	463	82	545	527	420	965	18				
1-01-FWA-04	HSE Management & Support	947		947	39.6%	15.4%	55.0%	54.8%	375	66	441	521	426	867	-80				
1-01-FWA-05	HAZOP Engineering	4,262		4,262	39.8%	15.2%	50.4%	50.4%	1,698	276	1,974	2,344	1,918	3,892	-370				
1-01-FWA-06	Project Management & Plan	1,894		1,894	85.3%	14.7%	100.0%	100.0%	1,615	285	1,900	1,894	0	1,900	6				
1-01-FWA-07	Follow-on Engineering Support	1,183		1,183	11.9%	13.1%	25.0%	25.3%	141	25	166	296	887	1,053	-130				
1-01-FWA-08	As-Building	3,788		3,788	0.0%	0.0%	0.0%	0.0%	0	0	0	0	3,788	3,788	0				
Management & Support Total		23,679	0	23,679	30.0%	7.8%	37.7%	36.4%	7,093	1,228	8,321	8,933	14,746	23,067	-612				
1-01-FWB-01	Procurement Management & Support	4,001		4,001	44.6%	11.4%	55.0%	55.6%	1,785	315	2,100	2,241	1,760	3,860	-141				
1-01-FWB-02	Purchasing	6,890		6,890	81.5%	14.5%	96.0%	97.0%	5,613	990	6,603	6,614	276	6,879	-11				
1-01-FWB-03	Expediting	4,667		4,667	35.6%	9.4%	45.0%	43.0%	1,662	293	1,955	2,100	2,567	4,522	-145				
1-01-FWB-04	Inspection	2,223		2,223	21.6%	12.4%	34.0%	33.0%	481	85	566	756	1,467	2,033	-190				
1-01-FWB-05	Contract Management	4,444		4,444	68.9%	9.1%	78.0%	77.5%	3,061	539	3,600	3,466	978	4,578	134				
Procurement Management & Support Total		22,225	0	22,225	56.7%	11.6%	66.3%	67.9%	12,602	2,222	14,824	15,177	7,048	21,872	-353				
1-01-FMC-01	Construction Management & Support	22,096		22,096	23.1%	1.9%	25.0%	23.7%	5,105	900	6,005	5,524	16,572	22,577	481				
Construction Management & Support Total		22,096	0	22,096	23.1%	1.9%	25.0%	23.7%	5,105	900	6,005	5,524	16,572	22,577	481				
1-01-FWD-01	Commissioning Management & Support	1,900		1,900	4.9%	0.1%	5.0%	2.1%	94	16	110	95	1,805	1,915	15				
Commissioning Management & Support Total		1,900	0	1,900	4.9%	0.1%	5.0%	2.1%	94	16	110	95	1,805	1,915	15				
EPCM MANAGEMENT & SUPPORT		69,900	244	69,900	35.6%	6.9%	42.5%	41.5%	24,894	4,366	29,260	29,730	40,170	69,430	-470				
1-03-EDA-01	Process Detailed Design	950	244	1,194	50.2%	22.8%	73.0%	72.0%	599	107	706	872	322	1,028	-166				
1-03-EDA-02	Structural Detailed Design	1,900		1,900	49.5%	5.5%	55.0%	54.0%	940	167	1,107	1,045	855	1,962	62				
1-03-EDA-03	Mechanical Detailed Design	1,710		1,710	44.6%	8.4%	53.0%	54.0%	762	134	896	906	1,700	1,700	-10				
1-03-EDA-04	Piping Detailed Design	5,890		5,890	56.3%	8.7%	66.0%	68.0%	3,314	585	3,899	3,829	2,062	5,961	71				
1-03-EDA-05	Electrical Detailed Design	2,090		2,090	29.3%	5.7%	35.0%	38.0%	613	108	721	732	1,359	2,080	-11				
1-03-EDA-06	Instrument Detailed Design	4,750		4,750	34.0%	3.0%	37.0%	36.7%	1,615	285	1,900	1,758	2,993	4,893	143				
1-03-EDA-07	Safety & Risk Detailed Design	1,710		1,710	40.0%	6.0%	46.0%	44.9%	684	122	806	787	923	1,729	19				
Module Detail Design Total		19,000	244	19,244	44.3%	7.3%	51.6%	52.3%	8,527	1,508	10,035	9,927	9,917	19,362	108				
1-03-EDB-01	Brownfield - Process Detailed Design	506		506	61.5%	15.5%	77.0%	79.0%	311	55	366	390	116	482	-24				
1-03-EDB-02	Brownfield - Structural Detailed Design	460		460	74.3%	14.7%	89.0%	83.0%	342	61	403	409	51	454	-6				
1-03-EDB-03	Brownfield - Mechanical Detailed Design	507		507	64.9%	18.1%	83.0%	84.0%	329	59	388	421	86	474	-33				
1-03-EDB-04	Brownfield - Piping Detailed Design	1,195		1,195	61.7%	9.3%	71.0%	70.0%	737	130	867	848	347	1,214	19				
1-03-EDB-05	Brownfield - Electrical Detailed Design	598		598	59.2%	6.8%	66.0%	66.6%	354	63	417	395	203	620	22				
1-03-EDB-06	Brownfield - Instrument Detailed Design	920		920	61.3%	10.7%	72.0%	71.7%	564	99	663	662	258	921	1				
1-03-EDB-07	Brownfield - Safety & Risk Detailed Design	414		414	54.8%	13.2%	68.0%	69.0%	227	40	267	282	132	399	-15				
Brownfield Modis / Tie-In Design Total		4,600	0	4,600	62.3%	11.8%	74.1%	73.6%	2,864	507	3,371	3,407	1,193	4,564	-36				
ENGINEERING & DESIGN		23,600	244	23,844	47.8%	8.1%	55.9%	56.5%	11,391	2,015	13,406	13,334	10,510	23,916	72				
OVERALL EPCM		93,500	244	93,744	38.71%	7.23%	45.94%	45.27%	36,285	6,361	42,646	43,064	50,680	93,346	-398				

**DEVELOPMENT / APACHE COMPRESSION PLATFORM
400100-8888 EPCM CONTRACT - INTERNAL COST PERFORMANCE**

NOTE: REPORTED MANHOUR COST INCLUDES \$10.00 PER HOUR OVERHEAD RECOVERY

Control Account A	CTR DESCRIPTION B	Manhours					% Complete				Expenditure (US \$)				Performance				
		Expenditure To Date C	To Complete D	At Completion E	Last Month F	This Period G	Current H	Last Month I	This Period J	Current K	Budget (US \$) L	Rem.Budget (US \$) M=(E-K)	ETC (US \$) N=(K/C)*D	EAC (US \$) O=(K+N)	U/O-run (US \$) P=(O-L)	Performance			
																U	O		
																	U	O	
															U	O			
	Project Management & Support (EPCM)	2,400	5,306	7,706	26.9%	3.1%	30.0%	85,568	15,100	100,668	\$ 293,845	\$ 193,177	\$ 222,560	\$ 323,228	\$ 29,383				
1-01-FWA-02	QA/QC Management & Support	895	2,001	2,896	24.7%	10.3%	35.0%	21,610	3,815	25,425	\$ 111,776	\$ 86,351	\$ 56,835	\$ 82,260	\$ -				
1-01-FWA-03	Engineering Management & Support	545	420	965	48.9%	6.8%	55.7%	18,233	3,229	21,462	\$ 33,152	\$ 11,890	\$ 16,521	\$ 37,983	\$ 4,831				
1-01-FWA-04	HSE Management & Support	441	426	867	39.6%	15.4%	55.0%	11,036	1,939	12,975	\$ 34,661	\$ 21,686	\$ 12,538	\$ 25,513	\$ 9,148				
1-01-FWA-05	HAZOP Engineering	1,974	1,918	3,892	39.8%	15.2%	55.0%	73,944	12,120	86,064	\$ 162,296	\$ 76,232	\$ 83,618	\$ 169,683	\$ 7,387				
1-01-FWA-06	Project Management & Plan	1,900	0	1,900	85.3%	14.7%	100.0%	36,280	6,402	42,682	\$ 68,770	\$ 26,088	\$ -	\$ 42,682	\$ -				
1-01-FWA-07	Follow-on Engineering Support	166	887	1,053	11.9%	13.1%	25.0%	6,026	1,066	7,092	\$ 43,349	\$ 36,257	\$ 37,907	\$ 44,999	\$ 1,650				
1-01-FWA-08	As-Building	0	3,788	3,788	0.0%	0.0%	0.0%	-	-	-	\$ 145,736	\$ 145,736	\$ 145,736	\$ 145,736	\$ -				
	Management & Support Total	8,321	14,746	23,067	30.0%	7.8%	37.7%	252,697	43,671	296,368	\$ 893,585	\$ 587,217	\$ 575,715	\$ 872,084	\$ -				
1-01-FWB-01	Procurement Management & Support	2,100	1,780	3,880	44.6%	11.4%	58.0%	73,485	12,966	86,451	\$ 174,793	\$ 88,342	\$ 72,473	\$ 158,924	\$ -				
1-01-FWB-02	Purchasing	6,603	276	6,879	81.5%	14.5%	96.0%	231,631	40,857	272,488	\$ 293,657	\$ 21,169	\$ 11,373	\$ 283,861	\$ 9,796				
1-01-FWB-03	Expediting	1,955	2,567	4,522	35.6%	9.4%	45.0%	68,504	12,077	80,581	\$ 203,914	\$ 123,333	\$ 105,801	\$ 186,382	\$ 17,532				
1-01-FWB-04	Inspection	566	1,467	2,033	21.6%	12.4%	34.0%	20,080	3,548	23,628	\$ 94,125	\$ 70,497	\$ 61,249	\$ 84,877	\$ 9,248				
1-01-FWB-05	Contract Management	3,600	978	4,578	68.9%	9.1%	78.0%	126,413	22,259	148,672	\$ 192,515	\$ 43,843	\$ 40,376	\$ 189,048	\$ 3,467				
	Procurement Management & Support Total	14,824	7,048	21,872	56.7%	11.6%	68.3%	520,115	91,707	611,822	\$ 959,004	\$ 347,182	\$ 291,272	\$ 903,093	\$ -				
1-01-FMC-01	Construction Management & Support	6,005	16,572	22,577	23.1%	1.9%	25.0%	235,418	41,506	276,924	\$ 1,071,761	\$ 794,837	\$ 764,227	\$ 1,041,151	\$ -				
	Construction Management & Support Total	6,005	16,572	22,577	23.1%	1.9%	25.0%	235,418	41,506	276,924	\$ 1,071,761	\$ 794,837	\$ 764,227	\$ 1,041,151	\$ -				
1-01-FMD-01	Commissioning Management & Support	110	1,805	1,915	4.9%	0.1%	5.0%	5,965	1,015	6,980	\$ 100,387	\$ 93,408	\$ 114,527	\$ 121,507	\$ 21,120				
	Commissioning Management & Support Total	110	1,805	1,915	4.9%	0.1%	5.0%	5,965	1,015	6,980	\$ 100,387	\$ 93,408	\$ 114,527	\$ 121,507	\$ 21,120				
	EPCM MANAGEMENT & SUPPORT	29,260	40,170	69,430	35.6%	6.9%	42.5%	1,014,195	177,899	1,192,094	\$ 3,024,737	\$ 1,832,643	\$ 1,745,742	\$ 2,937,835	\$ 86,902				
1-03-EDA-01	Process Detailed Design	706	322	1,028	50.2%	22.8%	73.0%	18,319	3,278	21,597	\$ 47,115	\$ 25,518	\$ 9,850	\$ 31,448	\$ 15,667				
1-03-EDA-02	Structural Detailed Design	1,107	855	1,962	49.5%	5.5%	55.0%	29,441	5,237	34,678	\$ 72,606	\$ 37,928	\$ 26,783	\$ 61,461	\$ 11,145				
1-03-EDA-03	Mechanical Detailed Design	896	804	1,700	44.6%	8.4%	53.0%	25,134	4,415	29,549	\$ 65,353	\$ 35,804	\$ 26,505	\$ 56,055	\$ 9,298				
1-03-EDA-04	Piping Detailed Design	3,899	2,062	5,961	56.3%	8.7%	65.0%	112,688	19,879	132,567	\$ 225,089	\$ 92,502	\$ 70,091	\$ 202,668	\$ 22,411				
1-03-EDA-05	Electrical Detailed Design	721	1,359	2,080	29.3%	5.7%	35.0%	17,688	3,117	20,805	\$ 79,858	\$ 59,053	\$ 39,201	\$ 60,007	\$ 19,851				
1-03-EDA-06	Instrument Detailed Design	1,900	2,993	4,893	34.0%	3.0%	37.0%	50,010	8,823	58,833	\$ 181,496	\$ 122,663	\$ 92,663	\$ 151,496	\$ 30,000				
1-03-EDA-07	Safety & Risk Detailed Design	806	923	1,729	40.0%	6.0%	46.0%	22,174	3,963	26,137	\$ 65,318	\$ 39,181	\$ 29,944	\$ 56,081	\$ 9,237				
	Module Detail Design Total	10,035	9,317	19,352	44.3%	7.3%	51.6%	275,455	48,712	324,167	\$ 736,815	\$ 412,648	\$ 295,039	\$ 619,206	\$ 117,609				
1-03-EDB-01	Brown field - Process Detailed Design	366	116	482	61.5%	15.5%	77.0%	10,268	1,796	12,064	\$ 19,354	\$ 7,290	\$ 3,836	\$ 15,900	\$ 3,454				
1-03-EDB-02	Brown field - Structural Detailed Design	403	51	454	74.3%	14.7%	89.0%	9,230	1,660	10,890	\$ 17,569	\$ 6,679	\$ 3,836	\$ 12,258	\$ 5,311				
1-03-EDB-03	Brown field - Mechanical Detailed Design	388	86	474	64.9%	18.1%	83.0%	10,568	1,879	12,447	\$ 19,374	\$ 6,927	\$ 2,765	\$ 15,212	\$ 4,162				
1-03-EDB-04	Brown field - Piping Detailed Design	867	347	1,214	61.7%	9.3%	71.0%	24,666	4,341	29,007	\$ 45,675	\$ 16,668	\$ 11,594	\$ 40,601	\$ 5,074				
1-03-EDB-05	Brown field - Electrical Detailed Design	417	203	620	59.2%	6.8%	66.0%	11,990	2,123	14,113	\$ 22,859	\$ 8,746	\$ 6,881	\$ 20,994	\$ 1,865				
1-03-EDB-06	Brown field - Instrument Detailed Design	663	258	921	61.3%	10.7%	72.0%	18,154	3,184	21,338	\$ 35,161	\$ 13,823	\$ 8,291	\$ 29,629	\$ 5,532				
1-03-EDB-07	Brown field - Safety & Risk Detailed Design	267	132	399	54.8%	13.2%	68.0%	7,181	1,255	8,436	\$ 15,819	\$ 7,383	\$ 4,186	\$ 12,622	\$ 3,197				
	Brown Field Mods / Tie-In Design Total	3,371	1,193	4,564	62.3%	11.8%	74.1%	92,057	16,238	108,295	\$ 175,811	\$ 67,516	\$ 38,920	\$ 147,215	\$ 28,596				
	ENGINEERING & DESIGN	13,406	10,510	23,916	47.8%	8.1%	55.9%	367,512	64,950	432,462	\$ 912,626	\$ 480,164	\$ 333,959	\$ 766,421	\$ 146,205				
	OVERALL EPCM	42,666	50,680	93,346	38.71%	7.23%	45.94%	\$ 1,381,706	\$ 242,849	\$ 1,624,555	\$ 3,937,363	\$ 2,312,808	\$ 2,079,701	\$ 3,704,256	\$ 233,107				

400100-88888 EPCM CONTRACT - PERFORMANCE AGAINST CROC BUDGET

DEVELOPMENT / APACHE COMPRESSION PLATFORM

Control Account	CTR DESCRIPTION	Manhours				% Complete				Charge Value (US \$)				Performance					
		Expenditure To Date	To Complete	At Completion	Last Month	This Period	Current	Last Month	This Period	Current	Budget	Rem. Budget	ETC	EAC	U/O-run	N=(K/C)xD		O=(K+N)	P=(O-L)
																M=(E-K)	N=(K/C)xD		
1-01-FWA-01	Project Management & Support (EPCM)	2,400	5,306	7,706	26.9%	3.1%	30.0%	\$ 108,460	\$ 19,140	\$ 127,600	\$ 344,147	\$ 216,547	\$ 282,102	\$ 409,702	\$ 66,555				
1-01-FWA-02	QA/QC Management & Support	895	2,001	2,896	24.7%	10.3%	35.0%	\$ 31,562	\$ 5,970	\$ 37,132	\$ 130,910	\$ 93,778	\$ 83,006	\$ 120,138	\$ 7,172				
1-01-FWA-03	Engineering Management & Support	545	420	965	48.9%	6.8%	55.7%	\$ 18,983	\$ 3,362	\$ 22,345	\$ 38,827	\$ 16,482	\$ 17,200	\$ 39,545	\$ 718				
1-01-FWA-04	HSE Management & Support	441	426	867	39.6%	15.4%	55.0%	\$ 16,040	\$ 2,820	\$ 18,860	\$ 40,594	\$ 21,734	\$ 18,225	\$ 37,085	\$ 3,509				
1-01-FWA-05	HAZOP Engineering	1,974	1,918	3,892	39.8%	15.2%	55.0%	\$ 80,202	\$ 13,188	\$ 93,390	\$ 190,078	\$ 96,688	\$ 90,736	\$ 184,126	\$ 5,952				
1-01-FWA-06	Project Management & Plan	1,900	0	1,900	85.3%	14.7%	100.0%	\$ 54,910	\$ 9,690	\$ 64,600	\$ 80,542	\$ 15,942	\$ -	\$ 64,600	\$ 15,942				
1-01-FWA-07	Follow-on Engineering Support	166	887	1,053	11.9%	13.1%	25.0%	\$ 7,187	\$ 1,271	\$ 8,458	\$ 50,770	\$ 42,312	\$ 45,207	\$ 53,665	\$ 2,895				
1-01-FWA-08	As-Building	0	3,788	3,788	0.0%	0.0%	0.0%	\$ -	\$ -	\$ -	\$ 170,685	\$ 170,685	\$ 170,685	\$ 170,685	\$ -				
	Management & Support Total	8,321	14,746	23,067	30.0%	7.8%	37.7%	\$ 317,344	\$ 55,041	\$ 372,385	\$ 1,046,553	\$ 674,168	\$ 707,161	\$ 1,079,546	\$ 32,993				
1-01-FWB-01	Procurement Management & Support	2,100	1,760	3,860	44.6%	11.4%	56.0%	\$ 89,487	\$ 15,784	\$ 105,271	\$ 204,715	\$ 99,444	\$ 88,249	\$ 193,520	\$ 11,195				
1-01-FWB-02	Purchasing	6,603	276	6,879	81.5%	14.5%	96.0%	\$ 284,226	\$ 50,147	\$ 334,373	\$ 343,926	\$ 9,553	\$ 13,956	\$ 348,329	\$ 4,403				
1-01-FWB-03	Expediting	1,955	2,567	4,522	35.6%	9.4%	45.0%	\$ 83,741	\$ 14,768	\$ 98,509	\$ 238,821	\$ 140,312	\$ 129,339	\$ 227,848	\$ 10,973				
1-01-FWB-04	Inspection	566	1,467	2,033	21.6%	12.4%	34.0%	\$ 25,535	\$ 4,511	\$ 30,046	\$ 110,237	\$ 80,191	\$ 77,885	\$ 107,931	\$ 2,306				
1-01-FWB-05	Contract Management	3,600	978	4,578	68.9%	9.1%	78.0%	\$ 155,483	\$ 27,381	\$ 182,864	\$ 225,471	\$ 42,607	\$ 49,662	\$ 232,526	\$ 7,055				
	Procurement Management & Support Total	14,824	7,048	21,872	56.7%	11.6%	68.3%	\$ 638,472	\$ 112,591	\$ 751,063	\$ 1,123,170	\$ 372,107	\$ 359,091	\$ 1,110,154	\$ 13,016				
1-01-FMC-01	Construction Management & Support	6,005	16,572	22,577	23.1%	1.9%	25.0%	\$ 280,937	\$ 49,531	\$ 330,468	\$ 1,255,229	\$ 924,761	\$ 911,993	\$ 1,242,461	\$ 12,768				
	Construction Management & Support Total	6,005	16,572	22,577	23.1%	1.9%	25.0%	\$ 280,937	\$ 49,531	\$ 330,468	\$ 1,255,229	\$ 924,761	\$ 911,993	\$ 1,242,461	\$ 12,768				
1-01-FMD-01	Commissioning Management & Support	110	1,805	1,915	4.9%	0.1%	5.0%	\$ 7,238	\$ 1,232	\$ 8,470	\$ 117,572	\$ 109,102	\$ 138,985	\$ 147,455	\$ 29,883				
	Commissioning Management & Support Total	110	1,805	1,915	4.9%	0.1%	5.0%	\$ 7,238	\$ 1,232	\$ 8,470	\$ 117,572	\$ 109,102	\$ 138,985	\$ 147,455	\$ 29,883				
	EPCM MANAGEMENT & SUPPORT	29,260	40,170	69,430	35.6%	6.9%	42.5%	\$ 1,243,991	\$ 218,395	\$ 1,462,386	\$ 3,542,524	\$ 2,080,138	\$ 2,117,230	\$ 3,579,616	\$ 37,092				
1-03-EDA-01	Process Detailed Design	706	322	1,028	50.2%	22.8%	73.0%	\$ 21,880	\$ 3,925	\$ 25,805	\$ 52,716	\$ 26,911	\$ 11,769	\$ 37,574	\$ 15,142				
1-03-EDA-02	Structural Detailed Design	1,107	855	1,962	49.5%	5.5%	55.0%	\$ 36,667	\$ 6,520	\$ 43,187	\$ 79,990	\$ 36,803	\$ 33,356	\$ 76,543	\$ 3,447				
1-03-EDA-03	Mechanical Detailed Design	896	804	1,700	44.6%	8.4%	53.0%	\$ 29,687	\$ 5,216	\$ 34,903	\$ 72,000	\$ 37,097	\$ 31,308	\$ 66,211	\$ 5,789				
1-03-EDA-04	Piping Detailed Design	3,899	2,062	5,961	56.3%	8.7%	65.0%	\$ 136,409	\$ 24,066	\$ 160,475	\$ 247,960	\$ 87,495	\$ 84,847	\$ 245,322	\$ 2,638				
1-03-EDA-05	Electrical Detailed Design	721	1,359	2,080	29.3%	5.7%	35.0%	\$ 21,789	\$ 3,843	\$ 25,632	\$ 47,388	\$ 27,348	\$ 48,296	\$ 73,928	\$ 14,052				
1-03-EDA-06	Instrument Detailed Design	1,900	2,993	4,893	34.0%	3.0%	37.0%	\$ 62,715	\$ 11,067	\$ 73,782	\$ 199,956	\$ 126,174	\$ 116,207	\$ 189,989	\$ 9,967				
1-03-EDA-07	Safety & Risk Detailed Design	806	923	1,729	40.0%	6.0%	46.0%	\$ 27,461	\$ 4,913	\$ 32,374	\$ 71,962	\$ 39,558	\$ 37,090	\$ 69,464	\$ 2,498				
	Module Detail Design Total	10,035	9,317	19,352	44.3%	7.3%	51.6%	\$ 336,608	\$ 59,550	\$ 396,158	\$ 812,562	\$ 416,466	\$ 362,872	\$ 759,030	\$ 53,534				
1-03-EDB-01	Brownfield - Process Detailed Design	366	116	482	61.5%	15.5%	77.0%	\$ 12,863	\$ 2,259	\$ 15,122	\$ 21,322	\$ 6,200	\$ 4,808	\$ 19,930	\$ 1,392				
1-03-EDB-02	Brownfield - Structural Detailed Design	403	51	454	74.3%	14.7%	89.0%	\$ 12,038	\$ 2,157	\$ 14,195	\$ 19,356	\$ 5,161	\$ 1,762	\$ 15,977	\$ 3,379				
1-03-EDB-03	Brownfield - Mechanical Detailed Design	388	86	474	64.9%	18.1%	83.0%	\$ 13,336	\$ 2,375	\$ 15,711	\$ 21,344	\$ 5,633	\$ 3,490	\$ 19,201	\$ 2,143				
1-03-EDB-04	Brownfield - Piping Detailed Design	867	347	1,214	61.7%	9.3%	71.0%	\$ 30,714	\$ 5,407	\$ 36,121	\$ 50,321	\$ 14,200	\$ 14,438	\$ 50,559	\$ 238				
1-03-EDB-05	Brownfield - Electrical Detailed Design	417	203	620	59.2%	6.8%	66.0%	\$ 14,204	\$ 2,520	\$ 16,724	\$ 25,184	\$ 8,460	\$ 8,154	\$ 24,878	\$ 306				
1-03-EDB-06	Brownfield - Instrument Detailed Design	663	258	921	61.3%	10.7%	72.0%	\$ 22,618	\$ 3,973	\$ 26,591	\$ 38,737	\$ 12,146	\$ 10,332	\$ 36,923	\$ 1,814				
1-03-EDB-07	Brownfield - Safety & Risk Detailed Design	267	132	399	54.8%	13.2%	68.0%	\$ 8,673	\$ 1,549	\$ 10,422	\$ 17,428	\$ 7,006	\$ 5,171	\$ 15,593	\$ 1,835				
	Brownfield Mod's / Tie-In Design Total	3,371	1,193	4,564	62.3%	11.8%	74.1%	\$ 114,646	\$ 20,240	\$ 134,886	\$ 193,692	\$ 58,806	\$ 48,176	\$ 183,062	\$ 10,630				
	ENGINEERING & DESIGN	13,406	10,510	23,916	47.8%	8.1%	55.9%	\$ 451,254	\$ 79,790	\$ 531,044	\$ 1,006,256	\$ 475,212	\$ 411,047	\$ 942,091	\$ 64,165				
	OVERALL EPCM	42,666	50,680	93,346	38.71%	7.23%	45.94%	\$ 1,695,245	\$ 298,185	\$ 1,993,430	\$ 4,548,780	\$ 2,555,350	\$ 2,528,277	\$ 4,521,707	\$ 27,073				

CONFIDENTIAL
For Internal Issue Only

400100-88888 - DEVELOPMENT
ACCOUNTS INVOICE REGISTER
WEEK ENDING 24 NOV 11

Date	Invoice No.	Invoice Description	Time Cost	Non-Labour Cost	Retention Fees	Invoiced Amount	Payments to-Date	Payment Date	Outstanding Amount
10-Feb-11	400100-88888/01	Manhour Charges WE 27-Jan-11	\$ 80,567	\$ -	\$ -	\$ 80,567	\$ 80,567	14-Apr-11	\$ -
28-Feb-11	400100-88888/02	Achievement Milestone M1 - PO Award SS	\$ -	\$ 317,782	\$ -	\$ 317,782	\$ 317,782	6-May-11	\$ -
10-Mar-11	400100-88888/03	Manhour Charges WE 24-Feb-11	\$ 99,672	\$ -	\$ -	\$ 99,672	\$ 99,672	6-May-11	\$ -
7-Apr-11	400100-88888/04	Manhour Charges WE 31-Mar-11	\$ 119,606	\$ -	\$ -	\$ 119,606	\$ 119,606	31-May-11	\$ -
7-Apr-11	400100-88888/05	Reimbursable non labours Jan - Mar 11	\$ -	\$ 31,060	\$ -	\$ 31,060	\$ 31,060	9-Jun-11	\$ -
12-May-11	400100-88888/06	Manhour Charges WE 28-Apr-11	\$ 139,540	\$ -	\$ -	\$ 139,540	\$ 139,540	11-Jul-11	\$ -
9-Jun-11	400100-88888/07	Manhour Charges WE 26-May-11	\$ 159,474	\$ -	\$ -	\$ 159,474	\$ 159,474	11-Aug-11	\$ -
30-Jun-11	400100-88888/08	Achievement Milestone M2 - ITT T & I	\$ -	\$ 317,782	\$ -	\$ 317,782	\$ 317,782	30-Aug-11	\$ -
7-Jul-11	400100-88888/09	Manhour Charges WE 30-Jun-11	\$ 179,409	\$ -	\$ -	\$ 179,409	\$ 179,409	12-Sep-11	\$ -
11-Aug-11	400100-88888/10	Manhour Charges WE 28-Jul-11	\$ 199,343	\$ -	\$ -	\$ 199,343	\$ 199,343	10-Oct-11	\$ -
11-Aug-11	400100-88888/11	Reimbursable non labours Apr-Jul 11	\$ -	\$ 7,640	\$ -	\$ 7,640	\$ 7,640	10-Oct-11	\$ -
8-Sep-11	400100-88888/12	Manhour Charges WE 25-Aug-11	\$ 219,277	\$ -	\$ -	\$ 219,277	\$ 219,277	4-Nov-11	\$ -
13-Oct-11	400100-88888/13	Manhour Charges WE 29-Sep-11	\$ 239,212	\$ -	\$ -	\$ 239,212	\$ -		\$ 239,212
13-Oct-11	400100-88888/14	Reimbursable non labours Aug-Sep 11	\$ -	\$ 6,300	\$ -	\$ 6,300	\$ -		\$ 6,300
10-Nov-11	400100-88888/15	Manhour Charges WE 27-Oct-11	\$ 259,146	\$ -	\$ -	\$ 259,146	\$ -		\$ 259,146
			\$ 1,695,245	\$ 680,564	\$ -	\$ 2,375,809	\$ 1,871,152		\$ 504,658

CONFIDENTIAL
For Internal Issue Only

400100-88888 - DEVELOPMENT
ACCOUNTS NON LABOUR REGISTER
WEEK ENDING 24 NOV 11

Date	Non Labour Category	Cost Amount	Chargable Amount	Invoiced Amount	Payments to-Date	Payment Date	Outstanding Amount
Reproduction / Printing							
27-Jan-11	Repro/Printing Charges M/E 27-Jan-06	\$ 543.50	\$ -	\$ -	\$ -		\$ -
24-Feb-11	Repro/Printing Charges M/E 24-Feb-06	\$ 907.00	\$ -	\$ -	\$ -		\$ -
31-Mar-11	Repro/Printing Charges M/E 31-Mar-06	\$ 1,451.50	\$ -	\$ -	\$ -		\$ -
28-Apr-11	Repro/Printing Charges M/E 28-Apr-06	\$ 1,633.00	\$ -	\$ -	\$ -		\$ -
28-May-11	Repro/Printing Charges M/E 26-May-06	\$ 1,814.50	\$ -	\$ -	\$ -		\$ -
30-Jun-11	Repro/Printing Charges M/E 30-Jun-06	\$ 1,996.00	\$ -	\$ -	\$ -		\$ -
28-Jul-11	Repro/Printing Charges M/E 28-Jul-06	\$ 2,177.00	\$ -	\$ -	\$ -		\$ -
25-Aug-11	Repro/Printing Charges M/E 25-Aug-06	\$ 2,358.50	\$ -	\$ -	\$ -		\$ -
29-Sep-11	Repro/Printing Charges M/E 29-Sep-06	\$ 2,540.00	\$ -	\$ -	\$ -		\$ -
27-Oct-11	Repro/Printing Charges M/E 27-Oct-06	\$ 2,721.50	\$ -	\$ -	\$ -		\$ -
24-Nov-11	Repro/Printing Charges M/E 24-Nov-06	\$ 3,190.50	\$ -	\$ -	\$ -		\$ -
Total-To -Date Reproduction / Printing		\$ 21,333.00	\$ -	\$ -	\$ -		\$ -
Travel Expenses							
4-Jan-11	Kick Off Meeting Chan / Halim KL-Melbourne	\$ 6,910	\$ 6,910	\$ 6,910	\$ 6,910	14-Apr-06	\$ -
12-Jan-11	Site Visit Bangkok Wipada, Ravindra, Leila	\$ 5,700	\$ 5,700	\$ 5,700	\$ 5,700	14-Apr-06	\$ -
15-Jan-11	Accommodation Chan / Halim	\$ 650	\$ 650	\$ 650	\$ 650	14-Apr-06	\$ -
15-Jan-11	Accommodation Bangkok Site Visit	\$ 1,300	\$ 1,300	\$ 1,300	\$ 1,300	14-Apr-06	\$ -
8-Feb-11	Site Visit Vietnam Ajith Kumar / Chan Hw ai Chuin	\$ 5,700	\$ 5,700	\$ 5,700	\$ 5,700	6-May-06	\$ -
10-Feb-11	Accommodation Cost Vietnam Site Visit	\$ 830	\$ 830	\$ 830	\$ 830	6-May-06	\$ -
15-Feb-11	Travel & Accommodation Penang	\$ 1,270	\$ 1,270	\$ 1,270	\$ 1,270	6-May-06	\$ -
19-Feb-11	Travel Teambuilding Kuantan	\$ 10,800	\$ -	\$ -	\$ -		\$ -
13-Mar-11	Travel & Accommodation Monthly Progress Meeting	\$ 4,300	\$ 4,300	\$ 4,300	\$ 4,300	9-Jun-06	\$ -
29-Mar-11	Travel & Accommodation Paglinawan Construction Yard	\$ 4,400	\$ 4,400	\$ 4,400	\$ 4,400	9-Jun-06	\$ -
22-Apr-11	Travel & Accommodation Kuantan	\$ 1,140	\$ 1,140	\$ 1,140	\$ 1,140	11-Jul-06	\$ -
14-Jun-11	Site Visit Suwit Thai Steel / YNL Maritime	\$ 6,500	\$ 6,500	\$ 6,500	\$ 6,500	10-Oct-06	\$ -
12-Sep-11	Travel & Accommodation Progress Meeting Bangkok	\$ 2,300	\$ 2,300	\$ 2,300	\$ -		\$ 2,300
14-Sep-11	Travel & Accommodation Progress Meeting Singapore	\$ 1,100	\$ 1,100	\$ 1,100	\$ -		\$ 1,100
16-Sep-11	Travel & Accommodation Progress Meeting Manila	\$ 2,900	\$ 2,900	\$ 2,900	\$ -		\$ 2,900
Total-To -Date Travel Expenses		\$ 55,800.00	\$ 45,000.00	\$ 45,000.00	\$ 38,700.00		\$ 6,300.00
Office / Communication							
27-Jan-11	Office / Communication Charges M/E 27-Jan-06	\$ 3,532.75	\$ -	\$ -	\$ -		\$ -
24-Feb-11	Office / Communication Charges M/E 24-Feb-06	\$ 5,895.50	\$ -	\$ -	\$ -		\$ -
31-Mar-11	Office / Communication Charges M/E 31-Mar-06	\$ 9,434.75	\$ -	\$ -	\$ -		\$ -
28-Apr-11	Office / Communication Charges M/E 28-Apr-06	\$ 10,614.50	\$ -	\$ -	\$ -		\$ -
28-May-11	Office / Communication Charges M/E 26-May-06	\$ 11,794.25	\$ -	\$ -	\$ -		\$ -
30-Jun-11	Office / Communication Charges M/E 30-Jun-06	\$ 12,974.00	\$ -	\$ -	\$ -		\$ -
28-Jul-11	Office / Communication Charges M/E 28-Jul-06	\$ 14,150.50	\$ -	\$ -	\$ -		\$ -
25-Aug-11	Office / Communication Charges M/E 25-Aug-06	\$ 15,330.25	\$ -	\$ -	\$ -		\$ -
29-Sep-11	Office / Communication Charges M/E 29-Sep-06	\$ 16,510.00	\$ -	\$ -	\$ -		\$ -
27-Oct-11	Office / Communication Charges M/E 27-Oct-06	\$ 17,689.75	\$ -	\$ -	\$ -		\$ -
24-Nov-11	Office / Communication Charges M/E 24-Nov-06	\$ 20,738.25	\$ -	\$ -	\$ -		\$ -
Total-To -Date Office / Communications		\$ 138,664.50	\$ -	\$ -	\$ -		\$ -
Computing / IT Support							
27-Jan-11	Computing / IT Support Charges M/E 27-Jan-06	\$ 271.75	\$ -	\$ -	\$ -		\$ -
24-Feb-11	Computing / IT Support Charges M/E 24-Feb-06	\$ 453.50	\$ -	\$ -	\$ -		\$ -
31-Mar-11	Computing / IT Support Charges M/E 31-Mar-06	\$ 725.75	\$ -	\$ -	\$ -		\$ -
28-Apr-11	Computing / IT Support Charges M/E 28-Apr-06	\$ 816.50	\$ -	\$ -	\$ -		\$ -
28-May-11	Computing / IT Support Charges M/E 26-May-06	\$ 907.25	\$ -	\$ -	\$ -		\$ -
30-Jun-11	Computing / IT Support Charges M/E 30-Jun-06	\$ 998.00	\$ -	\$ -	\$ -		\$ -
28-Jul-11	Computing / IT Support Charges M/E 28-Jul-06	\$ 1,088.50	\$ -	\$ -	\$ -		\$ -
25-Aug-11	Computing / IT Support Charges M/E 25-Aug-06	\$ 1,179.25	\$ -	\$ -	\$ -		\$ -
29-Sep-11	Computing / IT Support Charges M/E 29-Sep-06	\$ 1,270.00	\$ -	\$ -	\$ -		\$ -
27-Oct-11	Computing / IT Support Charges M/E 27-Oct-06	\$ 1,360.75	\$ -	\$ -	\$ -		\$ -
24-Nov-11	Computing / IT Support Charges M/E 24-Nov-06	\$ 1,595.25	\$ -	\$ -	\$ -		\$ -
Total-To -Date Computing / IT Support		\$ 10,666.50	\$ -	\$ -	\$ -		\$ -
Other Expenses							
14-Feb-11	Facilities Team Building Kuantan	\$ 9,700.00	\$ -	\$ -	\$ -		\$ -
Total-To -Date Other Expenses		\$ 9,700.00	\$ -	\$ -	\$ -		\$ -