

Project Report
(Allied Engineering & Services Private Ltd.) – Construction of
Power House Pakistan Railways

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PREFACE

As a part of MSPM curriculum and in order to practically implement the understanding in the field of Project Management, I am required to make report on “Construction of Power House Pakistan Railways which also includes the installation of generators”. The basic behind doing this report is to understand working methodology of Microsoft Project 2013.

In this project report, I have included various concepts, MS Project 2013 implementation and charts regarding cost, activities and schedule of the project.

This project report helped us to enhance our Project Management skills and knowledge to work in more effective way using software tool (MS Project 2013). I faced many difficulties during making this reports and numerous lessons learned which will help me in my Practical life.

Acknowledgement

To make any project supervision and references are very important, deprived of which project is unfinished. I am extremely thankful to **Mr. Ahsan Maqbool, Bahria University Lahore Campus** for his guidance and constant direction and compulsory information apropos to the project & their help in finalizing the project.

However, it would not have been possible without the generous support and assistance of many people, including university management and colleagues. We would like to extend our sincere appreciations to all of them.

I would like to express our gratitude towards our Parents for their kind co-operation and inspiration which helps me in accomplishment of this project. I am also grateful to the people who eagerly helped us out with their capabilities.

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1 Introduction of Organization

Allied Engineering and Services (Pvt.) Ltd, established in 1976, is the main Dealer of Caterpillar Machines and Power Generation (Generators) in Pakistan. Firstly, it was working with FORD machines and tractors then they moved on and got the Dealership of Caterpillar U.S.A because Caterpillar Products are very reliable and good quality wise, so they are famous worldwide and are Leading competitors in Power Generation and Machines in particular ventures. Moreover, Allied Engineering and Services (Pvt.) Ltd. is the sole Dealer of Caterpillar Products regarding generation and machines in Pakistan since 1976 adding more than 1500 MW in Pakistan as standby and continues power source.

The main famous Engines of Caterpillar were Diesel but now a day due to high rates of Oil prices, it introduced gas engines in market which are continues power source and produce lower rate of electricity as compared to other power generation sources so it came with the market pioneer for base load application with over 50% of the overall textile industry. With economical fuel consumption, new CAT Gas engines series CG170, CG260 is introduced and being installed all over Pakistan.

1.1 Vision

Offer aggregate answers for clients including Sales, buy back, Rental (Including operation and equipment supply) and operational agreements

- Become the market creator in all products
- Employ the best human resources throughout the regions
- Permit Employees to work in best environment
- Maintain and update proper hardware and tooling
- Six sigma system as a Standard work system
- Meet client needs and demands

1.2 Mission

To be ahead of the customer needs, offer value added services, products & superior technology through standard tools and techniques as per demand.

1.3 Branches in Pakistan

Allied Engineering and Services (Pvt.) Ltd. has main Headquarter in Karachi, and have regional offices in vital areas of Pakistan. Our prepared and qualified Service teams are available 24 hours to give the needed services during and later the Warranty time.

- I. Lahore
- II. Islamabad
- III. Multan
- IV. Faisalabad
- V. Peshawar
- VI. Quetta

1.4 Products from AESL

Allied Engineering and Services (Pvt.) Ltd. Primarily works with CAT (Caterpillar) U.S.A

Products and services available by AESL are:

- Compressors
- Engines
- Rental Machinery
- Power Systems
- Fluids
- Parts and Services
- Generators

1.5 Contribution of AESL in Industries

Allied Engineering and Services (Pvt.) Ltd. Is contributing in following industries in Pakistan.

- General Construction
- Waste
- Oil and Gas side
- Textile
- Marine
- Education
- Mining
- Electric Power Generation
- Roads and bridges construction

1.6 Functional Departments of AESL

There are eight functional departments of Allied Engineering and Services (Pvt.) Ltd.

1. Logistics Department
2. Operations and Maintenance Department
3. Overhauling Department
4. Sales and Marketing Department
5. Commercial Department
6. Audit and Inspection Department
7. Information Technology Department
8. Finance Department
9. Procurement Department
10. Human Resource Department

All these departments work under the supervision of the Respective Regional managers and these regional managers report to country Directors and all the directors report to the Managing Director. Managing Director (MD) then reports to the Chairman of the company.

1.7 Major Lines of Business

Allied Engineering and Services (Pvt.) Ltd. is one of the renowned and recognized organizations in the Power Solution providing division in Pakistan. Allied Engineering and Services (Pvt.) Ltd. is considered dependable throughout its area of operations. The 3 major areas of business of Allied Engineering and Services (Pvt.) Ltd. are:

- i. Supplies
- ii. Managed Services
- iii. Overhauling Services

1.7.1 Managed Services

- DG and Air Con services
- Commercial Power Services
- DC system services
- Complete Logistics support
- Refueling service
- Civil work services
- Electrical and mechanical fabrication works
- Repair and maintenance services

1.7.2 Overhauling Service

- Fully equipped workshops
- Rating: 5KVA to 2.5MW
- Overhauling 100 engines per year
- Monthly capacity is more than 5 Gensets

1.7.3 Supplies

- Gas Generators
- Diesel Generators
- UPS
- Energy Saving Products
- Solar Energy
- Spare Parts, Equipment
- Earth Moving Heavy Machinery

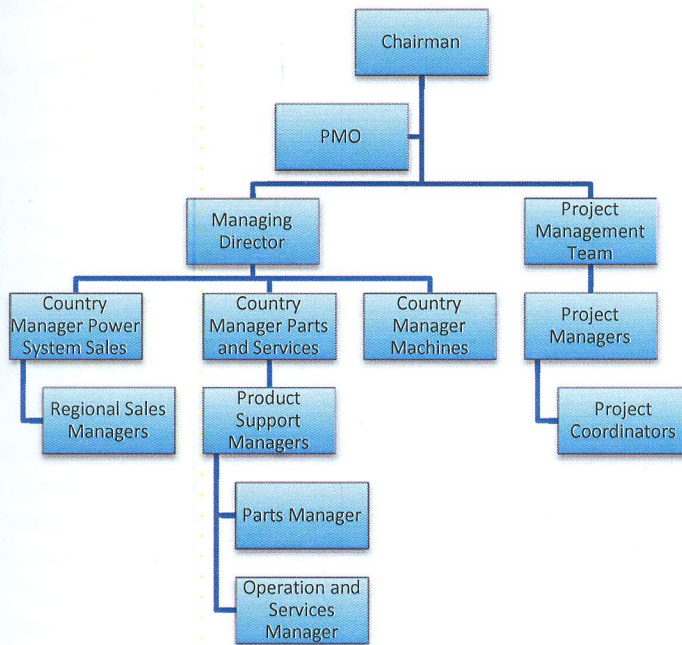
2 Culture of the Organization:

2.1 Project Reporting Structure:

In our organization project managers are partially accountable for achievement and disaster of the project. They have partial authority of the funds, but the project managers have full right to assign importance, apply resources, and direct the human resources assigned to the project. Company follows a Strong Matrix Organizational structure.



2.2 Hierarchy of Organization:



3 PMO

3.1 Introduction to PMO:

PMO is characterized as a gathering of Individuals who have the association's venture administration prepare as per PMI. They have the benefit to change anything in the venture administration prepare. They set up the venture supervisors and handhold to them the methodology of execution. They are the all-inclusive community who ensure that venture Managing director is taking after the technique, for which he perform survey once in a while.

Formally, a PMO head is the person, to who both program and wander bosses finally report. He is not the individual who makes a couple of presentations, goes to different venture directors, gets their wander orchestrates and makes a PPT consequently, or a surpass desires presentation or report out of it. PMOs are not the ones, who are accountable for guaranteeing that the dealers' sales are being paid and their affiliation's requesting are being sent to the customers in time; nor are they the overall public who research whether the tickets are expert for the advantages in the wander that they are doing. Those are not the endeavors of Project Management Office. Those are venture administrator station practices that have nothing to do with PMO as per PMI.

3.2 Definition:

"It is a hierarchical body or element, relegated with different duties identified with the incorporated and facilitated administration of those projects that are in its domain"

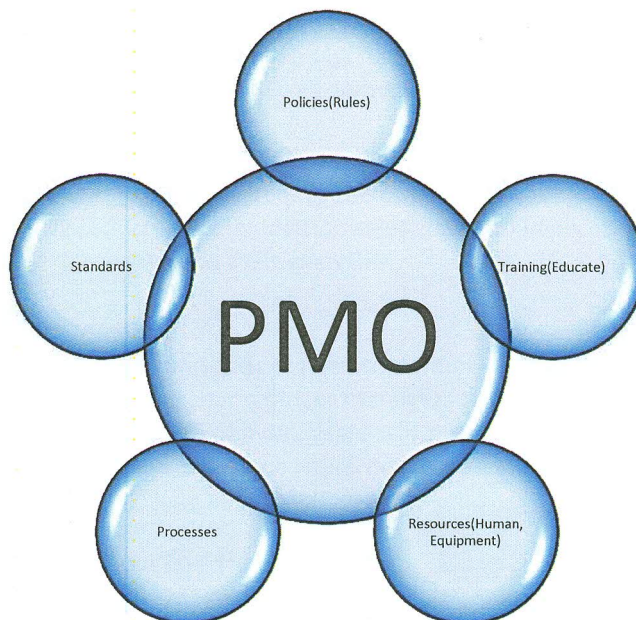
The essential capacity of PMO is to bolster the project managers in an assortment of ways, which may incorporate, however is not restricted to:

- i. Regulating shared resources over the undertakings oversight
- ii. Recognizing and making wider organization reasoning, prescribed procedures and rules
- iii. Teaching, coaching, get ready, and oversight
- iv. Watching consistence with PM gages, techniques, strategies and arrangements
- v. Making and supervising wider methodologies, frameworks, groups and other shared documentation
- vi. Arranging correspondence transversely over endeavors

3.3 Functions of PMO:

Following are the functions of PMO:

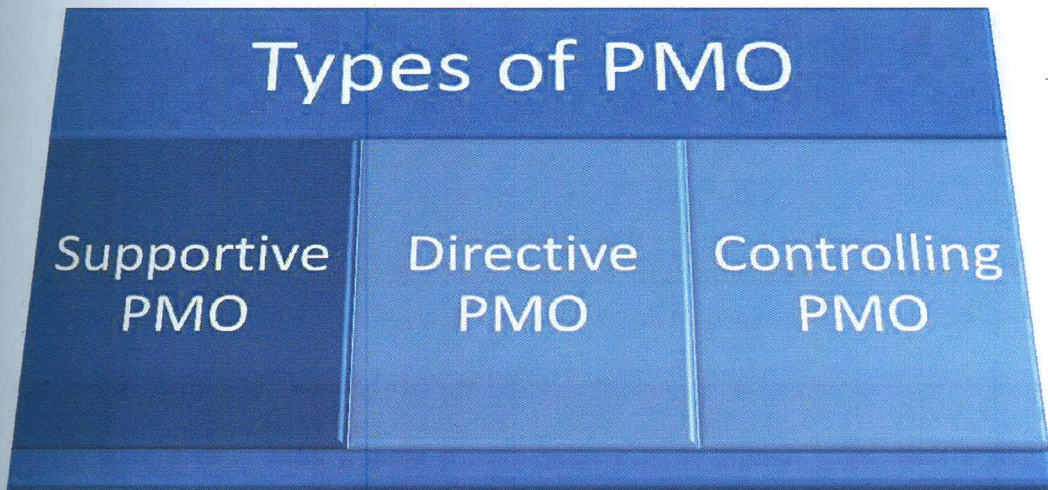
- i. Creating guidelines
- ii. Resource administration for all endeavors
- iii. Giving readiness and directions for venture group
- iv. Overseeing conditions across over different various undertakings
- v. Providing insights with respect to budgetary information that is ROI
- vi. Risk Management for the total project
- vii. Scope administration of the venture
- viii. Assign and strengthen staff to manage all assignments



3.4 Types of PMO

There are three types of PMO, mentioned below:

1. Supportive PMO
2. Directive PMO
3. Controlling PMO



3.4.1 Supportive PMO

This gives support as meetings open upon request. It gives shapes, information, and particular support to get ready for the venture group without constraining control on their Project or activities. This sort of work environments fits foundations that are known for their dominant assignments and are recently in necessity for some sort of datacenter. It is depicted by its low level of control on exercises and gatherings, despite taking after united models in all endeavors.

3.4.2 Directive PMO

This sort of offices gives a bound together system to the organization, which requires conformities and alterations on the utilized procedures, and in addition structures and applications. Likewise, it forces a direct level of control on undertakings and their exercises.

3.4.3 Controlling PMO

This sort is known for its high control on tasks, or even completely managing projects with giving required assets and support. The office characterizes managers to pursue it specifically reaching for the PMO extend. This sort likewise gives high demonstrable skill in managing projects, where each managers needs to compose periodic reports for the office which ensures an abnormal state of consistency in work on activities level.

3.5 Different classification for PMOs type's:

Project Management Institute (PMI) classifies PMOs to five different types:

1. **Departmental:** Supports definite business entities or divisions.
2. **Project Specific:** Supervises the accomplishment of a specific project.
3. **Strategic:** Administers main organizational variations.
4. **Project Support:** Handles executive tasks to speed project completion.
5. **Centre of excellence:** Handles training and evolving project managers.

PMOs may be classified to one of the following types from an organizational point of view:

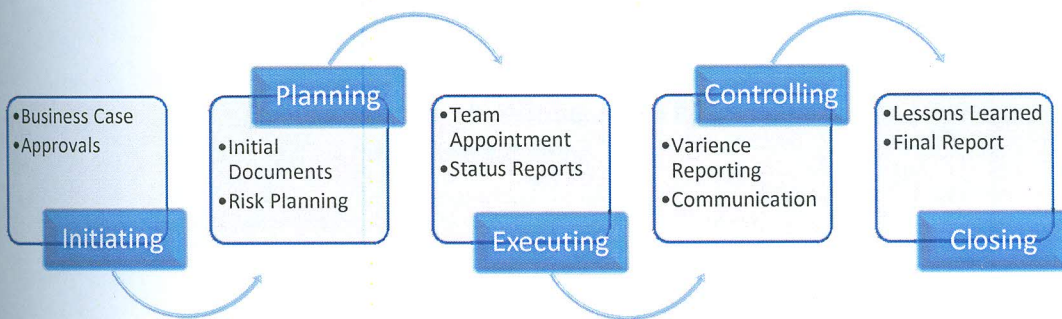
1. Enterprise PMO
2. Departmental PMO
3. Distinctive purpose PMO

3.6 Why need PMO?

Here we mentioned the five key reasons why we need PMO:

1. Constrained Visibility into Project Performance
2. You have constrained assets and capacity planning is an issue
3. There is no predictable system for project delivery
4. There is an absence of possession and additionally responsibility
5. Projects regularly come in late or over spending plan and neglect to meet the goal

3.7 Project Management Life Cycle:



3.8 Roles of PMO:

Entrepreneur or Sponsor: His occupation is to build up the extent of the venture and characterize different components of the specific venture for conveying comes about. The entrepreneur must have adequate information and involvement with respect to taking care of different tasks so he can take educated choices.

Venture Executive: The venture official is really the pioneer of the venture and is typically considered responsible for the disappointment or achievement of the venture. He is the rousing and managing figure for all venture colleagues. It is generally the senior director in the innovation division whose tasks are tech driven.

Venture Manager: The extend director is in charge of leading the pack in dealing with the whole group and co-coordinating their activities every day. He/she likewise sets out the arrangement for different exercises to be embraced alongside settled courses of events inside which the venture must be conveyed.

Project Team: The venture group constitutes the real gathering of individuals who play out the exercises to convey yields as per pre-decided objectives by the Project Manager.

3.9 Responsibilities of PMO:

- While the administration measures for the project are set by the PMO, it is likewise important to guarantee that the group tails them. This is accomplished through steady project appraisal strategies. It gets input on the advance of the venture too.
- The PMO keeps a record of the advance of different undertakings being taken care of by the organization on the premise of redesigns got from various venture supervisors. Institutionalization techniques are taken after with respect to the way in which the information is gathered and introduced as reports to the administration. Project dashboards are normally used to showcase such information which is a straightforward strategy to keep a mind the different venture statuses.
- In a few associations, the general population taking care of or executing activities may not really be prepared formally for venture administration. The PMO in this manner assumes an imperative part in giving help to this gathering.

3.10 Advantages of PMO:

PMO have many advantages from which few are mentioned below:

- Reliable Project administration system
- Consistent designs/layouts and other venture administration shapes
- Less requesting move of Projects
- Making the control of the venture supervisor more straightforward
- Coordination between Projects
- Brought together lessons learned
- Steady Earned Value Analysis
- Higher consumer loyalty

3.11 Disadvantages of PMO:

PMO also have some drawbacks which are mentioned as under:

- Setup overhead
- The PMO costs money, so it Costs overhead
- Time overhead

- Additional mark away at the Project Manager
- Uncertainty in the PMO parts and duties
- Potential conflict with the client
- Projects do not meet timelines, no status meeting, no visibility to the the top management
- More cost is incurred because of Project Management
- Sudden decisions cannot be taken on their own because they need to refer from PM documents

Business Drivers

Business Drivers for our organization are represented in the image below:



4 Selected Project & Documents

4.1 Project Title

“Construction of Power House Pakistan Railways”

4.2 Project Description

Pakistan Railways provide us (Allied Engineering (Pvt.) Ltd.) with location they want us to deliver and install Diesel Generators. We as a service provider and sole importer of CAT generators in Pakistan ordered generators from our Parent vendor (Caterpillar) and installed them at the site of PR (Pakistan Railways). In this project we dealt with transportation of DG's to installation and contracting. In this specific project we had to deliver 2.5 MW of power, which was generated by 2 CAT Diesel Gensets D3512, includes the construction of Power house building and its HVAC work providing Three months of Operational staff was also part of Project.

4.3 Project Need

Pakistan Railways Headquarters situated in Lahore near Lahore Railway Station. Power Generation for Railway Employee Colonies and Headquarters were Steam turbines and old type Diesel Generators but with passage of time, they had completed their life and expired so there was a need of new Power Generation House which can fulfil the requirements of Colonies as well as Headquarters.

4.4 Project Brief

Project Title	Construction of Power House PR
Sponsoring Agency	Pakistan Railways
Executing Agency	Allied Engineering (Pvt.) Ltd.
Operations and Maintenance	Allied Engineering (Pvt.) Ltd.
Original Cost	150 million PKR
Approval Status	Approved (1st Sep 2016)
Planned Start Date	Oct 3 rd 2016
Actual Start Date	Oct 3 rd 2016
Planned End Date	March 2 nd 2017
Planned Gestation Period	7 months
Beneficiaries	Pakistan Railways HQ Lahore and Colony

5 Project Charter

Authorizations	Name	Function	Name	Signature
Author	-----	Project Manager	Mr. Farooq Ijaz	-----
Approved	Sep 1, 2016	Project Sponsor	Pakistan Railways	-----
Project Background		Allied Engineering and services private Limited specializes in providing supply and installation services to all major industries in Pakistan		
Expected Business Benefits		To establish itself as a front most service providing company in Pakistan		
Proposed Start Date	Oct 1, 2016	Proposed End Date	March 1, 2017	
Project Objectives		I. To ensure the uninterrupted Power to Headquarters and Colony Employees II. To maintain the all equipment inside or outside power house III. Completion of Project within time and budget IV. Ensuring Construction of Power House and HVAC installation		
Project Scope		Constructing, Supplying, installing and testing generators		
Executing Agency		Allied Engineering and Services Private Limited		
Project Sponsor		Pakistan Railways		
Cost		Rs. 150 million		
Issues/Risks		i. Delay in shipment ii. Faulty generator iii. Site issue iv. Team busy at another site of importance v. Communication Gap vi. Poor Funding		
Meetings		Pakistan Railways PM with AESL PM team		
Project Team Meeting		Once in a Week		
Reports				
Progress Reports		On daily basis		
Closure Reports		At the End of Each Mile Stone		

5.1 Deliverables

QTY	ITEM	BUYER	AESL	SUPPLIER	ORIGIN
1-	CAT DIESEL GENSETS DIESEL GENSETS 02*D3512@ 11Kv CAT, (NEWBERRY) LLC.	-	NILL	CAT	US
2-	CONTROL PANEL	-	NILL	ENERCON	US
3-	NGR/NGR SWITCH ONLY	-	NILL	ENERCON	US
4-	Caterpillar Fork Lifter DP50N of 05 Tons Capacity	-	NILL	CAT	CHINA
5-	03 Years Consumable Spare parts (Considering 10000 hrs operation)	-	NILL	CAT	EUROPE

5.1.1 Project Team Members

- Mechanical Team
- Electrical Team
- Services and Maintenance Team
- Civil Contractor(outsourced)
- HVAC work Contractor(outsourced)
- Installation and Erection Team

5.1.2 Milestones:

- i. Commissioning of Gensets.
- ii. Construction of Power house building
- iii. Training of Operational staff
- iv. Commissioning of Control Panels
- v. Commissioning of Fork Lifter
- vi. Delivery of 3 years consumable parts or 10000 hours

5.1.3 Stakeholders

Stakeholder Name	Stakeholder Type
Allied Engg. And Services LTD. Lahore	Primary Stakeholder
Building Constructing Contractor	Secondary Stakeholder
HVAC Vendor	Secondary Stakeholder
Pakistan Railways	Primary stakeholder
Housing Colonies	Key stakeholder
Regulatory Authorities	Key Stakeholder

5.1.4 Project Scope Description

Main scope of project was to Commission the two diesel generators with manual start and remote start from Remote Control Panels and also synchronizing them with utility side

For this, building construction was also needed for Genset Placing and control panels placing so for civil work of building contract was awarded by AESL project team. Rooms were also constructed for power house labor and management team. HVAC work will be accomplished of hall and rooms by vendor

Control panels would be provided by ENERCON U.S.A through Allied Engineering and services LTD. NGR and MV panels would be provided by Siemens but final supplier and responsible for all panels will be allied Engg. And Services LTD.

5.1.5 Project's Constraints

Following are project constraints for this project, which must be handled carefully, so project may become a success.

Time:

Project is targeted to be completed in five months i.e. 1st Oct 2016 to 1st March 2017. In case of delay in project, PR imposed LDs (Late Delay Penalties).

Budget:

The total allocated budget for power house was Rs. 150 million. It includes the building construction and all required Equipment installation. Management reserves in terms of cost were kept in advance.

Quality:

A quality work was the main issue with this project. Because normally Quality is not considered as major constraint in Railways project. However, Regular inspection and meetings were held to inspect the work.

5.2 Project Risks (Assumptions):

Identified Risks of the project are:

- Quality Material availability at minimum costing
- Tackling Stakeholder's influences.
- Fixing Team relationships
- Warranting after sales services successful
- Resource allocation
- Availability of equipment on time

Project Exclusions:

Project will not deal in specifications of fuel quality i.e. Pakistan Railways Staff will be responsible for the fuel supply and fuel quality but it will be ensured that fuel testing report will be provided in early stages of engine running so that if any problem occurs regarding fuel system, AESL will not be responsible for it.

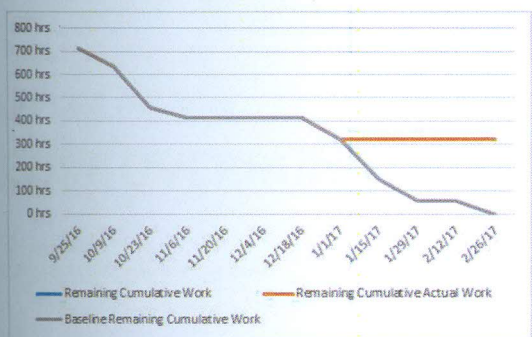
Moreover, Load sharing and controlling will also be excluded from scope of PM team. PR staff will be trained for first three months of Power house operation by PM team staff.

6 MS-Project 2013

6.1 Burndown

Mon 10/3/16 - Fri 3/3/17

BURNDOWN



WORK BURNDOWN
Shows how much work you have completed and how much you have left. If the remaining cumulative work line is steeper, then the project may be late. Is your baseline zero?

[Try setting a baseline](#)



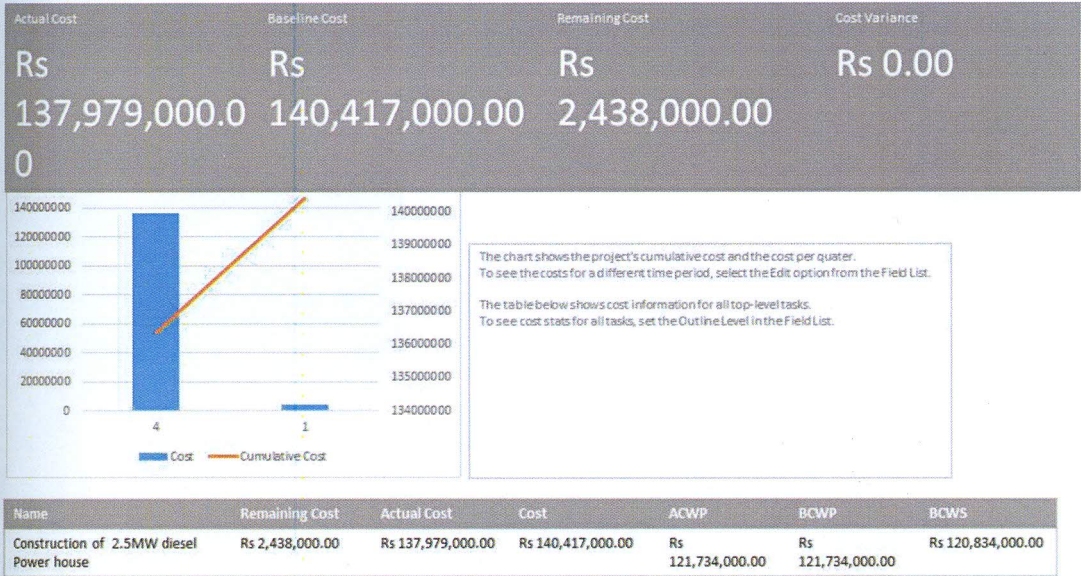
TASK BURNDOWN
Shows how many tasks you have completed and how many you have left. If the remaining tasks line is steeper, then your project may be late.

[Learn more](#)

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

6.2 Cash Flow

CASH FLOW



The chart shows the project's cumulative cost and the cost per quarter. To see the costs for a different time period, select the Edit option from the Field List.

The table below shows cost information for all top-level tasks. To see cost stats for all tasks, set the Outline Level in the Field List.

6.3 Cost Overrun

COST OVERRUNS

TASK COST VARIANCE

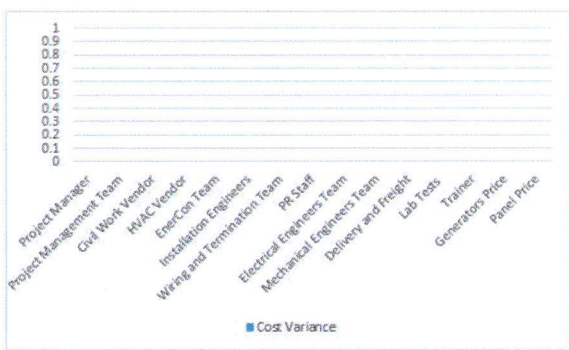
Cost variance for all top-level tasks in the project.



Name	% Complete	Cost	Baseline Cost	Cost Variance
Construction of 2.5MW diesel Power house	51%	Rs 140,417,000.00	Rs 140,417,000.00	Rs 0.00

RESOURCE COST VARIANCE

Cost variance for all the work resources.



Name	Cost	Baseline Cost	Cost Variance
Project Manager	Rs 720,000.00	Rs 720,000.00	Rs 0.00
Project Management Team	Rs 660,000.00	Rs 660,000.00	Rs 0.00
Installation Engineers	Rs 306,000.00	Rs 306,000.00	Rs 0.00
Wiring and Termination Team	Rs 138,000.00	Rs 138,000.00	Rs 0.00
PR Staff	Rs 32,000.00	Rs 32,000.00	Rs 0.00
Electrical Engineers Team	Rs 324,000.00	Rs 324,000.00	Rs 0.00
Mechanical Engineers Team	Rs 192,000.00	Rs 192,000.00	Rs 0.00

6.4 Cost Overview

COST OVERVIEW

MON 10/3/16 - FRI 3/3/17

COST

Rs 140,417,000.00

REMAINING COST

Rs 2,438,000.00

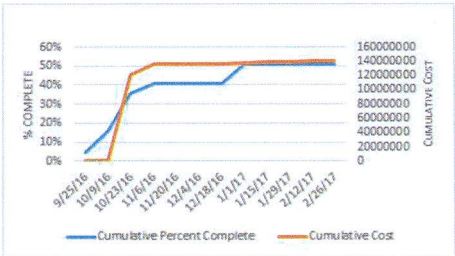
% COMPLETE

51%

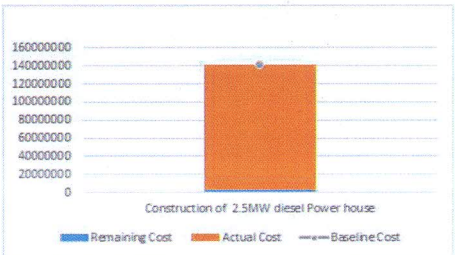
COST STATUS
Cost status for top level tasks.

Name	Actual Cost	Remaining Cost	Baseline Cost	Cost	Cost Variance
Construction of 2.5MW diesel Power house	Rs 137,979,000.00	Rs 2,438,000.00	Rs 140,417,000.00	Rs 140,417,000.00	Rs 0.00

PROGRESS VERSUS COST
Progress made versus the cost spent over time. If % Complete line below the cumulative cost line, your project may be over budget.



COST STATUS
Cost status for all top-level tasks. Is your baseline zero?
[Try setting as baseline](#)



6.5 Critical Tasks

CRITICAL TASKS



■ Status Complete ■ Status Future Task

A task is critical if there is no room in the schedule for it to slip.
[Learn more about managing your project's critical path](#)

Name	Start	Finish	% Complete	Remaining Work	Resource Names
Electrical connections and energising the gensets	Mon 1/16/17	Mon 1/16/17	0%	8 hrs	Electrical Engineers Team,Wiring and Termination Team
Gensets Panels testing	Mon 1/16/17	Mon 1/16/17	0%	4 hrs	Electrical Engineers Team
Adjusting parameters	Tue 1/17/17	Tue 1/17/17	0%	4 hrs	Electrical Engineers Team
Soft Start of both Gensets	Tue 1/17/17	Tue 1/17/17	0%	8 hrs	Electrical Engineers Team,Mechanical Engineers Team
Start from remote control panels	Wed 1/18/17	Wed 1/18/17	0%	2 hrs	Electrical Engineers Team,EnerCon Team
Safety Testing	Wed 1/18/17	Wed 1/18/17	0%	2 hrs	Electrical Engineers Team,Mechanical Engineers Team
Performing final load test	Wed 1/18/17	Wed 1/18/17	0%	2 hrs	Electrical Engineers Team,Mechanical Engineers Team
100% Load test performing	Wed 1/18/17	Wed 1/18/17	0%	12 hrs	Electrical Engineers Team,EnerCon Team,Mechanical Engineers Team,Wiring and Termination Team
Generator Commissioning finalization	Thu 1/19/17	Thu 1/19/17	0%	24 hrs	Electrical Engineers Team,Mechanical Engineers Team,Project Management Team

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

Successful Commissioned Generators	Thu 1/19/17	Thu 1/19/17	0%	0 hrs	
PDI of Panels	Fri 1/20/17	Fri 1/20/17	0%	0 hrs	EnerCon Team[Rs 20,000.00]
Termination of MV panels	Fri 1/20/17	Fri 1/20/17	0%	0 hrs	EnerCon Team[Rs 20,000.00]
Termination of ENERCON Control Panels	Fri 1/20/17	Fri 1/20/17	0%	0 hrs	EnerCon Team[Rs 20,000.00]
Termination of NGR	Mon 1/23/17	Mon 1/23/17	0%	8 hrs	Wiring and Termination Team
Termination of Charging system circuit	Tue 1/24/17	Tue 1/24/17	0%	16 hrs	Electrical Engineers Team, Wiring and Termination Team
Termination of fuel tanks controlling system	Wed 1/25/17	Wed 1/25/17	0%	8 hrs	Electrical Engineers Team, Wiring and Termination Team
Termination of 1/w heater circuit	Wed 1/25/17	Wed 1/25/17	0%	8 hrs	Electrical Engineers Team, Wiring and Termination Team
NGR Inspection	Thu 1/26/17	Thu 1/26/17	0%	4 hrs	Electrical Engineers Team
Wiring verification of auxillary circuits	Thu 1/26/17	Thu 1/26/17	0%	8 hrs	Electrical Engineers Team, Wiring and Termination Team
wiring verification of fuel controlling system	Fri 1/27/17	Fri 1/27/17	0%	4 hrs	Electrical Engineers Team, Wiring and Termination Team
Wiring verification of MV Panels	Fri 1/27/17	Fri 1/27/17	0%	4 hrs	Electrical Engineers Team, Wiring and Termination Team

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

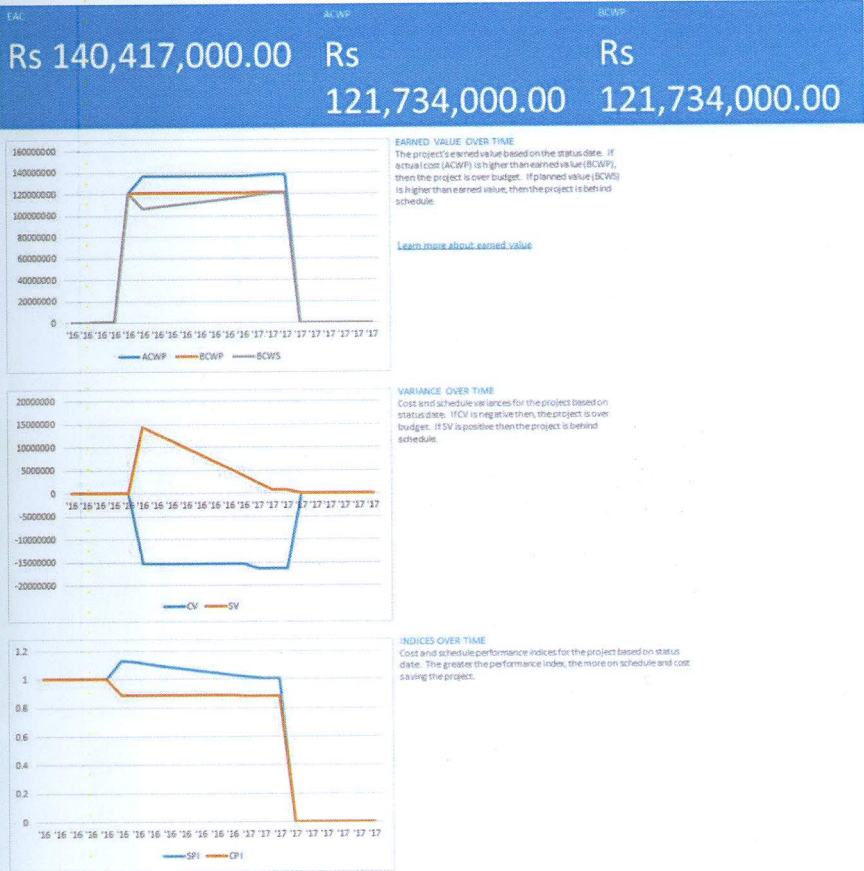
Successful Commissioned Generators	Thu 1/19/17	Thu 1/19/17	0%	0 hrs	
PDI of Panels	Fri 1/20/17	Fri 1/20/17	0%	0 hrs	EnerCon Team[Rs 20,000.00]
Termination of MV panels	Fri 1/20/17	Fri 1/20/17	0%	0 hrs	EnerCon Team[Rs 20,000.00]
Termination of ENERCON Control Panels	Fri 1/20/17	Fri 1/20/17	0%	0 hrs	EnerCon Team[Rs 20,000.00]
Termination of NGR	Mon 1/23/17	Mon 1/23/17	0%	8 hrs	Wiring and Termination Team
Termination of Charging system circuit	Tue 1/24/17	Tue 1/24/17	0%	16 hrs	Electrical Engineers Team, Wiring and Termination Team
Termination of fuel tanks controlling system	Wed 1/25/17	Wed 1/25/17	0%	8 hrs	Electrical Engineers Team, Wiring and Termination Team
Termination of J/w heater circuit	Wed 1/25/17	Wed 1/25/17	0%	8 hrs	Electrical Engineers Team, Wiring and Termination Team
NGR Inspection	Thu 1/26/17	Thu 1/26/17	0%	4 hrs	Electrical Engineers Team
Wiring verification of auxiliary circuits	Thu 1/26/17	Thu 1/26/17	0%	8 hrs	Electrical Engineers Team, Wiring and Termination Team
wiring verification of fuel controlling system	Fri 1/27/17	Fri 1/27/17	0%	4 hrs	Electrical Engineers Team, Wiring and Termination Team
Wiring verification of MV Panels	Fri 1/27/17	Fri 1/27/17	0%	4 hrs	Electrical Engineers Team, Wiring and Termination Team

6.6 Earned Value

EARNED VALUE

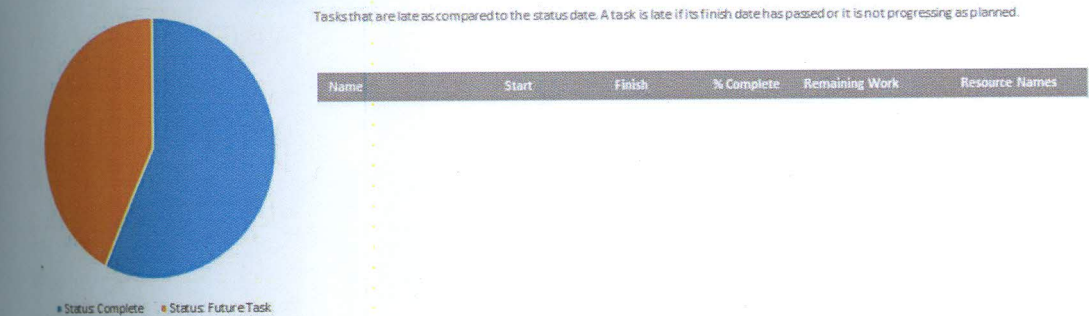
Earned value management helps you quantify the performance of a project. It compares costs and schedules to a baseline to determine if the project is on track.

If the charts don't look right, make sure you have set a baseline, assigned costs to tasks or resources, and entered progress.



6.7 Late Tasks

LATE TASKS



6.8 Milestone Report

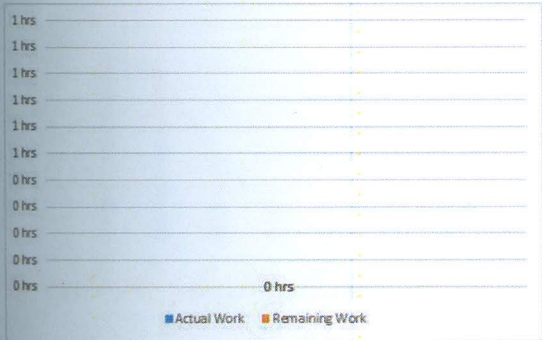


6.9 Over-allocated Resources

OVERALLOCATED RESOURCES

WORK STATUS

Work status for overallocated resources.



OVERALLOCATION

Surplus work assigned to overallocated resources. To resolve overallocations use

[Team Planner View](#)



6.10 Project Overview

PROJECT OVERVIEW

MON 10/3/16 - FRI 3/3/17



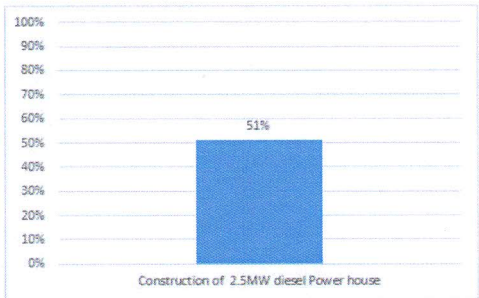
MILESTONES DUE

Milestones that are coming soon.

Name	Finish
Completion and handover of building	Fri 2/3/17
Successful Commissioned Generators	Thu 1/19/17
Panel is installed finalized	Fri 1/27/17
Fort filter commissioning Completed	Wed 2/1/17
closing of Project	Fri 3/3/17

% COMPLETE

Status for all top-level tasks. To see the status for subtasks, click on the chart and update the outline level in the Field List.



LATE TASKS

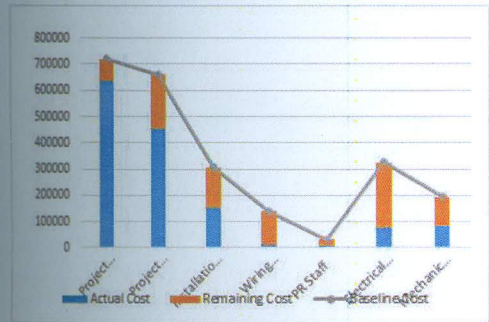
Tasks that are past due.

Name	Start	Finish	Duration	% Complete	Resource Names
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6.11 Resource Cost Overview

RESOURCE COST OVERVIEW

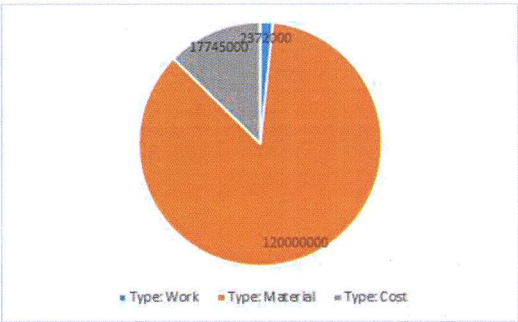
COST STATUS
Cost status for work resources.



COST DETAILS
Cost details for all work resources.

Name	Actual Work	Actual Cost	Standard Rate
Project Manager	160 hrs	Rs 640,000.00	Rs 4,000.00/hr
Project Management Team	152 hrs	Rs 456,000.00	Rs 3,000.00/hr
Installation Engineers	52 hrs	Rs 156,000.00	Rs 3,000.00/hr
Wiring and Termination Team	4 hrs	Rs 12,000.00	Rs 3,000.00/hr
PR Staff	8 hrs	Rs 8,000.00	Rs 1,000.00/hr
Electrical Engineers Team	26 hrs	Rs 78,000.00	Rs 3,000.00/hr
Mechanical Engineers Team	28 hrs	Rs 84,000.00	Rs 3,000.00/hr

COST DISTRIBUTION
How costs are spread out amongst different resource types.

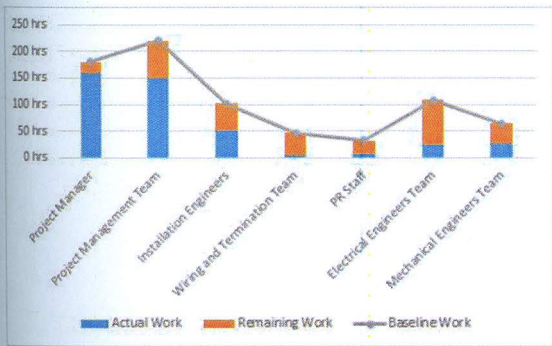


6.12 Resource Overview

RESOURCE OVERVIEW

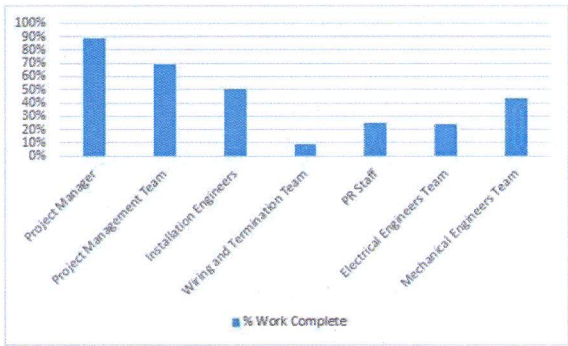
RESOURCE STATS

Work status for all work resources.



WORK STATUS

% work done by all the work resources.



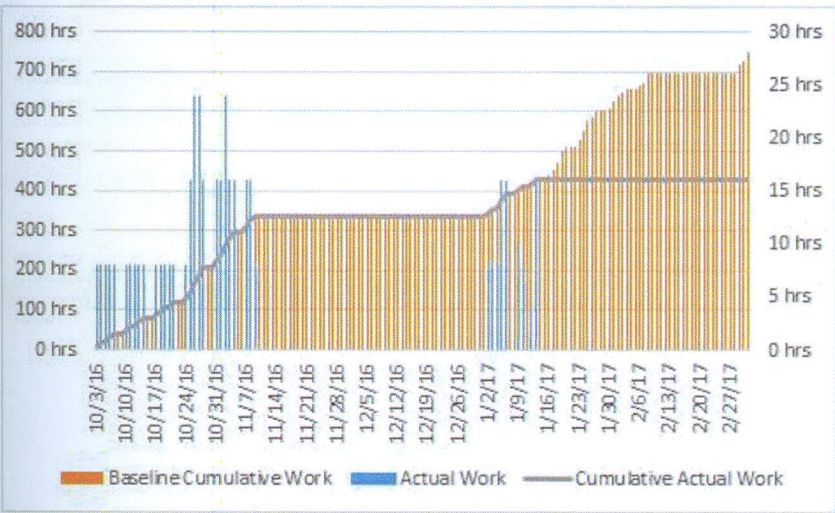
RESOURCE STATUS

Remaining work for all work resources.

Name	Start	Finish	Remaining Work
Project Manager	Mon 10/3/16	Fri 3/3/17	20 hrs
Project Management Team	Tue 10/11/16	Fri 3/3/17	68 hrs
Installation Engineers	Wed 11/2/16	Wed 2/1/17	50 hrs
Wiring and Termination Team	Thu 1/12/17	Fri 1/27/17	42 hrs
PR Staff	Tue 10/25/16	Fri 3/3/17	24 hrs
Electrical Engineers Team	Thu 1/5/17	Fri 3/3/17	82 hrs
Mechanical Engineers Team	Thu 1/5/17	Fri 3/3/17	36 hrs

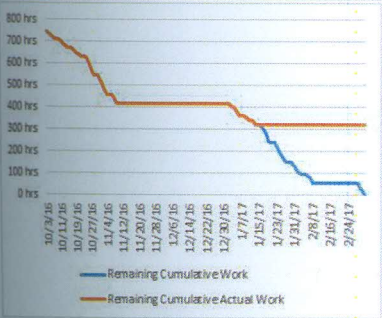
6.13 S Curve

S Curve



6.14 Slipping Task

SLIPPING TASKS



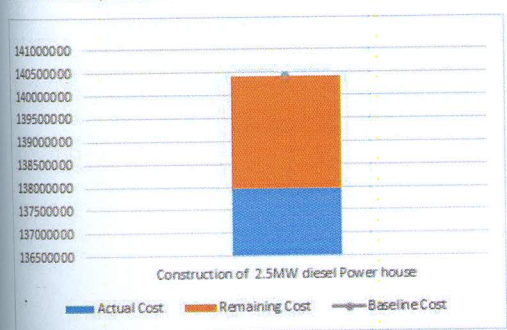
Tasks where the finish date is past the baseline finish date.

Name	Start	Finish	% Complete	Remaining Work	Resource Names
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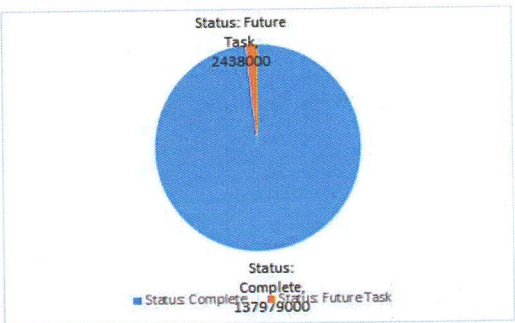
6.15 Task Cost Overview

TASK COST OVERVIEW

COST STATUS
Cost status for top-level tasks.



COST DISTRIBUTION
How costs are spread out amongst tasks based on their status.



COST DETAILS
Cost details for all top-level tasks.

Name	Fixed Cost	Actual Cost	Remaining Cost	Cost	Baseline Cost	Cost Variance
Construction of 2.5MW dieselPower house	Rs 0.00	Rs 137,979,000.00	Rs 2,438,000.00	Rs 140,417,000.00	Rs 140,417,000.00	Rs 0.00

6.16 Upcoming Task

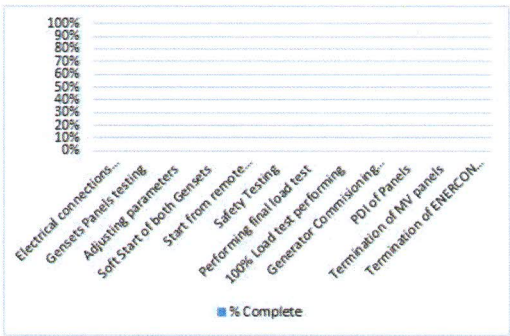


Mon 10/3/16 - Fri 3/3/17

UPCOMING TASKS

REMAINING TASKS

Status of remaining tasks that are due this week

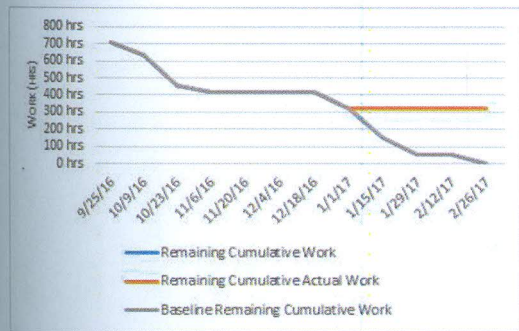


TASKS STARTING SOON

Status of tasks starting in the next week

Name	Resource Names	Start	Finish	Work
Installation of Crane in Generator Hall	Installation Engineers,Civil Work Vendor[Rs 200,000.00]	Thu 1/19/17	Wed 1/25/17	40 hrs
Electrical connections and energising the gensets	Electrical Engineers Team,Wiring and Termination Team	Mon 1/16/17	Mon 1/16/17	8 hrs
Gensets Panels testing	Electrical Engineers Team	Mon 1/16/17	Mon 1/16/17	4 hrs
Adjusting parameters	Electrical Engineers Team	Tue 1/17/17	Tue 1/17/17	4 hrs
Soft Start of both Gensets	Electrical Engineers Team,Mechanical Engineers Team	Tue 1/17/17	Tue 1/17/17	8 hrs
Start from remote control panels	Electrical Engineers Team,EnerCon Team	Wed 1/18/17	Wed 1/18/17	2 hrs
Safety Testing	Electrical Engineers Team,Mechanical Engineers Team	Wed 1/18/17	Wed 1/18/17	2 hrs
Performing final load test	Electrical Engineers Team,Mechanical Engineers Team	Wed 1/18/17	Wed 1/18/17	2 hrs
100% Load test performing	Electrical Engineers Team,EnerCon Team,Mechanical Engineers Team,Wiring and Termination Team	Wed 1/18/17	Wed 1/18/17	12 hrs
Generator Commissioning finalization	Electrical Engineers Team,Mechanical Engineers Team,Project Management Team	Thu 1/19/17	Thu 1/19/17	24 hrs
PDI of Panels	EnerCon Team[Rs 20,000.00]	Fri 1/20/17	Fri 1/20/17	0 hrs
Termination of MV panels	EnerCon Team[Rs 20,000.00]	Fri 1/20/17	Fri 1/20/17	0 hrs
Termination of ENERCON Control Panels	EnerCon Team[Rs 20,000.00]	Fri 1/20/17	Fri 1/20/17	0 hrs

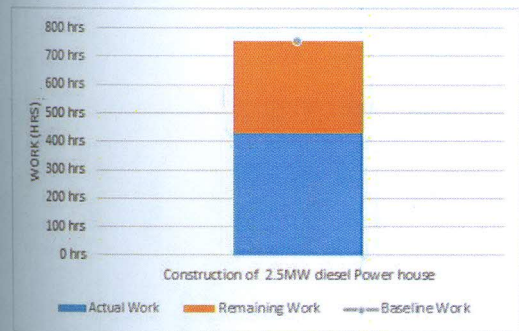
6.17 Work Overview



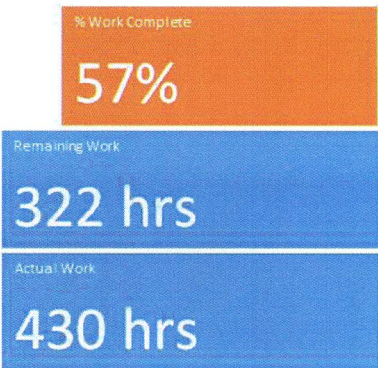
WORK BURNDOWN
Shows how much work you have completed and how much you have left. If the remaining cumulative work line is steeper, then the project may be late.

Is your baseline work zero?

[Try setting a baseline](#)

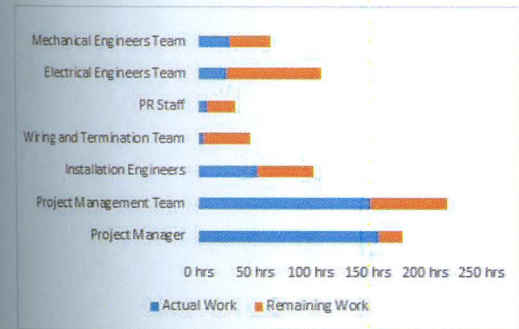


WORK STATS
Shows work stats for all top level tasks.

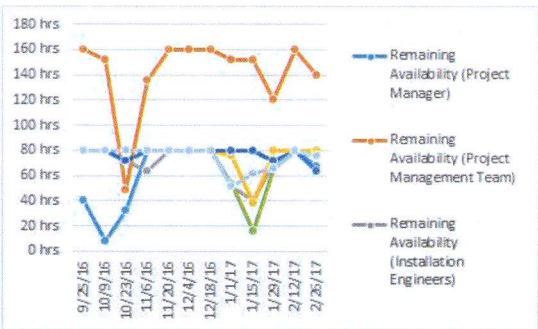


WORK OVERVIEW

Mon 10/3/16 - Fri 3/3/17



RESOURCE STATS
Shows work stats for all your resources.



REMAINING AVAILABILITY
Shows remaining availability for all work resources.

6.18 Gantt Chart

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

ID	Task Mode	WBS	Task Name	Start	Finish	Duration	Predecessors	Baseline Start
1		1	Construction of 2.5MW diesel Power house Initiating	Mon 10/3/16	Fri 3/3/17	110 days		Mon 10/3/16
2		1.1		Mon 10/3/16	Tue 10/25/16	17 days		Mon 10/3/16
3		1.1.1	Tendering	Mon 10/3/16	Tue 10/25/16	17 days		Mon 10/3/16
4		1.1.1.1	Tendering opening	Mon 10/3/16	Mon 10/3/16	1 day		Mon 10/3/16
5		1.1.1.2	Tender Bidding time	Tue 10/4/16	Mon 10/10/16	5 days	4	Tue 10/4/16
6		1.1.1.3	Tender winning and project handover	Tue 10/11/16	Tue 10/11/16	1 day	5	Tue 10/11/16
7		1.1.1.4	Creating Project Charter	Wed 10/12/16	Mon 10/17/16	4 days	6	Wed 10/12/16
8		1.1.1.5	Developing Project Documents	Tue 10/18/16	Fri 10/21/16	4 days	7	Tue 10/18/16
9		1.1.1.6	Submission of Project Documents for Approvals	Mon 10/24/16	Mon 10/24/16	1 day	8	Mon 10/24/16
10		1.1.1.7	Stakeholder meetings for consenses	Tue 10/25/16	Tue 10/25/16	1 day	9	Tue 10/25/16
11		1.1.1.8	Project Charter and Project document completion	Tue 10/25/16	Tue 10/25/16	0 days	10	Tue 10/25/16
12		1.2	Planning	Wed 10/26/16	Mon 1/2/17	49 days		Wed 10/26/16
13		1.2.1	Risk Planning	Wed 10/26/16	Tue 11/8/16	10 days		Wed 10/26/16
14		1.2.1.1	Risk Identification	Wed 10/26/16	Thu 10/27/16	2 days	11	Wed 10/26/16
15		1.2.1.2	Developing Risk Register	Fri 10/28/16	Mon 10/31/16	2 days	14	Fri 10/28/16
16		1.2.1.3	Risk Analysis	Tue 11/1/16	Wed 11/2/16	2 days	15	Tue 11/1/16
17		1.2.1.4	Making of Risk Response Plan	Thu 11/3/16	Tue 11/8/16	4 days	16	Thu 11/3/16
18		1.2.2	Schedule Planning	Wed 10/26/16	Tue 11/1/16	5 days		Wed 10/26/16

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

Baseline Finish	Baseline Estimated Duration	% Complete	Cost	Resource Names	Total Slack	Actual Start	Actual Finish
Fri 3/3/17	110 days	51%	Rs 140,417,000.00		0 days	Mon 10/3/16	NA
Tue 10/25/16	17 days	100%	Rs 536,000.00		0 days	Mon 10/3/16	Tue 10/25/16
Tue 10/25/16	17 days	100%	Rs 536,000.00		0 days	Mon 10/3/16	Tue 10/25/16
Mon 10/3/16	1 day	100%	Rs 32,000.00	Project Manager	0 days	Mon 10/3/16	Mon 10/3/16
Mon 10/10/16	5 days	100%	Rs 160,000.00	Project Manager	0 days	Tue 10/4/16	Mon 10/10/16
Tue 10/11/16	1 day	100%	Rs 24,000.00	Project Management Team	0 days	Tue 10/11/16	Tue 10/11/16
Mon 10/17/16	4 days	100%	Rs 128,000.00	Project Manager	0 days	Wed 10/12/16	Mon 10/17/16
Fri 10/21/16	4 days	100%	Rs 128,000.00	Project Manager	0 days	Tue 10/18/16	Fri 10/21/16
Mon 10/24/16	1 day	100%	Rs 24,000.00	Project Management Team	0 days	Mon 10/24/16	Mon 10/24/16
Tue 10/25/16	1 day	100%	Rs 40,000.00	Project Manager, PR Staff	0 days	Tue 10/25/16	Tue 10/25/16
Tue 10/25/16	0 days	100%	Rs 0.00		0 days	Tue 10/25/16	Tue 10/25/16
Mon 1/2/17	49 days	100%	Rs 121,940,000.00		0 days	Wed 10/26/16	Mon 1/2/17
Tue 11/8/16	10 days	100%	Rs 256,000.00		0 days	Wed 10/26/16	Tue 11/8/16
Thu 10/27/16	2 days	100%	Rs 48,000.00	Project Management Team	0 days	Wed 10/26/16	Thu 10/27/16
Mon 10/31/16	2 days	100%	Rs 48,000.00	Project Management Team	0 days	Fri 10/28/16	Mon 10/31/16
Wed 11/2/16	2 days	100%	Rs 64,000.00	Project Manager	0 days	Tue 11/1/16	Wed 11/2/16
Tue 11/8/16	4 days	100%	Rs 96,000.00	Project Management Team	0 days	Thu 11/3/16	Tue 11/8/16
Tue 11/1/16	5 days	100%	Rs 192,000.00		0 days	Wed 10/26/16	Tue 11/1/16

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

Actual Duration	Actual Cost	Work	Actual Work
55.86 days	Rs 137,979,000.00	752 hrs	430 hrs
17 days	Rs 536,000.00	144 hrs	144 hrs
17 days	Rs 536,000.00	144 hrs	144 hrs
1 day	Rs 32,000.00	8 hrs	8 hrs
5 days	Rs 160,000.00	40 hrs	40 hrs
1 day	Rs 24,000.00	8 hrs	8 hrs
4 days	Rs 128,000.00	32 hrs	32 hrs
4 days	Rs 128,000.00	32 hrs	32 hrs
1 day	Rs 24,000.00	8 hrs	8 hrs
1 day	Rs 40,000.00	16 hrs	16 hrs
0 days	Rs 0.00	0 hrs	0 hrs
49 days	Rs 121,940,000.00	200 hrs	200 hrs
10 days	Rs 256,000.00	80 hrs	80 hrs
2 days	Rs 48,000.00	16 hrs	16 hrs
2 days	Rs 48,000.00	16 hrs	16 hrs
2 days	Rs 64,000.00	16 hrs	16 hrs
4 days	Rs 96,000.00	32 hrs	32 hrs
5 days	Rs 192,000.00	56 hrs	56 hrs

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

ID	Task Mode	WBS	Task Name	Start	Finish	Duration	Predecessors	Baseline Start
19	✓	1.2.2.1	Develop Schedule Plan	Wed 10/26/16	Thu 10/27/16	2 days	14SS	Wed 10/26/16
20	✓	1.2.2.2	Estimate activity resources	Fri 10/28/16	Fri 10/28/16	1 day	19	Fri 10/28/16
21	✓	1.2.2.3	Identification of prioritized task	Mon 10/31/16	Mon 10/31/16	1 day	20	Mon 10/31/16
22	✓	1.2.2.4	Creation of resource sheet	Tue 11/1/16	Tue 11/1/16	1 day	21	Tue 11/1/16
23	✓	1.2.2.5	Initial Planning Completion	Tue 11/1/16	Tue 11/1/16	0 days	22	Tue 11/1/16
24	✓	1.2.3	Equipment Ordering	Wed 11/2/16	Mon 1/2/17	44 days		Wed 11/2/16
25	✓	1.2.3.1	Order submission of generators and panel	Wed 11/2/16	Wed 11/2/16	1 day	23	Wed 11/2/16
26	✓	1.2.3.2	Payments completion	Thu 11/3/16	Thu 11/3/16	2 hrs	25	Wed 11/2/16
27	✓	1.2.3.3	Shipment of Generator and Panel	Fri 12/30/16	Mon 1/2/17	6 hrs	26	Fri 12/30/16
28	✓	1.2.3.4	Receiving of hardware at Karachi port	Mon 1/2/17	Mon 1/2/17	1 day	27	Mon 1/2/17
29	✓	1.2.3.5	Delivery completion	Mon 1/2/17	Mon 1/2/17	0 days	28	Mon 1/2/17
30	✓	1.2.4	Site Selection	Wed 11/2/16	Mon 11/7/16	4 days		Wed 11/2/16
31	✓	1.2.4.1	Site feasibility report preparation	Wed 11/2/16	Wed 11/2/16	1 day	23	Wed 11/2/16
32	✓	1.2.4.2	Site Documentation	Thu 11/3/16	Thu 11/3/16	1 day	31	Thu 11/3/16
33	✓	1.2.4.3	Site Approval Request	Fri 11/4/16	Fri 11/4/16	1 day	32	Fri 11/4/16
34	✓	1.2.4.4	Site approval response	Mon 11/7/16	Mon 11/7/16	1 day	33	Mon 11/7/16
35	✓	1.2.4.5	Site selection completed	Mon 11/7/16	Mon 11/7/16	0 days	34	Mon 11/7/16
36	✓	1.2.5	Preparation of building design	Tue 11/8/16	Wed 11/9/16	2 days		Tue 11/8/16
37	✓	1.2.5.1	Preparation of SLDs	Tue 11/8/16	Tue 11/8/16	1 day	35	Tue 11/8/16
38	✓	1.2.5.2	Area Specification for fuel tanks	Tue 11/8/16	Tue 11/8/16	0 days	37	Tue 11/8/16
39	✓	1.2.5.3	Soil testing	Wed 11/9/16	Wed 11/9/16	1 day	38	Wed 11/9/16

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

Baseline Finish	Baseline Estimated Duration	% Complete	Cost	Resource Names	Total Slack	Actual Start	Actual Finish
Thu 10/27/16	2 days	100%	Rs 112,000.00	Project Management	0 days	Wed 10/26/16	Thu 10/27/16
Fri 10/28/16	1 day	100%	Rs 24,000.00	Project Management Team	0 days	Fri 10/28/16	Fri 10/28/16
Mon 10/31/16	1 day	100%	Rs 32,000.00	Project Manager	0 days	Mon 10/31/16	Mon 10/31/16
Tue 11/1/16	1 day	100%	Rs 24,000.00	Project Management Team	0 days	Tue 11/1/16	Tue 11/1/16
Tue 11/1/16	0 days	100%	Rs 0.00		0 days	Tue 11/1/16	Tue 11/1/16
Mon 11/2/17	44 days	100%	Rs 121,148,000.00		0 days	Wed 11/2/16	Mon 11/2/17
Wed 11/2/16	1 day	100%	Rs 24,000.00	Project Management Team	0 days	Wed 11/2/16	Wed 11/2/16
Thu 11/3/16	0.25 days	100%	Rs 120,000,000.00	Generators Price[2],f	0 hrs	Thu 11/3/16	Thu 11/3/16
Mon 11/2/17	0.75 days	100%	Rs 1,100,000.00	Delivery and Freight[Rs	0 hrs	Fri 12/30/16	Mon 11/2/17
Mon 11/2/17	1 day	100%	Rs 24,000.00	Project Management Team	0 days	Mon 11/2/17	Mon 11/2/17
Mon 11/2/17	0 days	100%	Rs 0.00		0 days	Mon 11/2/17	Mon 11/2/17
Mon 11/7/16	4 days	100%	Rs 96,000.00		0 days	Wed 11/2/16	Mon 11/7/16
Wed 11/2/16	1 day	100%	Rs 24,000.00	Installation Engineers	0 days	Wed 11/2/16	Wed 11/2/16
Thu 11/3/16	1 day	100%	Rs 24,000.00	Project Management	0 days	Thu 11/3/16	Thu 11/3/16
Fri 11/4/16	1 day	100%	Rs 24,000.00	Project Management	0 days	Fri 11/4/16	Fri 11/4/16
Mon 11/7/16	1 day	100%	Rs 24,000.00	Project Management	0 days	Mon 11/7/16	Mon 11/7/16
Mon 11/7/16	0 days	100%	Rs 0.00		0 days	Mon 11/7/16	Mon 11/7/16
Wed 11/9/16	2 days	100%	Rs 248,000.00		0 days	Tue 11/8/16	Wed 11/9/16
Tue 11/8/16	1 day	100%	Rs 24,000.00	Installation Engineer:	0 days	Tue 11/8/16	Tue 11/8/16
Tue 11/8/16	0 days	100%	Rs 200,000.00	Civil Work Vendor[Rs	0 days	Tue 11/8/16	Tue 11/8/16
Wed 11/9/16	1 day	100%	Rs 24,000.00	Installation Engineer:	0 days	Wed 11/9/16	Wed 11/9/16

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

Actual Duration	Actual Cost	Work	Actual Work
2 days	Rs 112,000.00	32 hrs	32 hrs
1 day	Rs 24,000.00	8 hrs	8 hrs
1 day	Rs 32,000.00	8 hrs	8 hrs
1 day	Rs 24,000.00	8 hrs	8 hrs
0 days	Rs 0.00	0 hrs	0 hrs
44 days	Rs 121,148,000.00	16 hrs	16 hrs
1 day	Rs 24,000.00	8 hrs	8 hrs
2 hrs	Rs 120,000,000.00	0 hrs	0 hrs
6 hrs	Rs 1,100,000.00	0 hrs	0 hrs
1 day	Rs 24,000.00	8 hrs	8 hrs
0 days	Rs 0.00	0 hrs	0 hrs
4 days	Rs 96,000.00	32 hrs	32 hrs
1 day	Rs 24,000.00	8 hrs	8 hrs
1 day	Rs 24,000.00	8 hrs	8 hrs
1 day	Rs 24,000.00	8 hrs	8 hrs
0 days	Rs 0.00	0 hrs	0 hrs
2 days	Rs 248,000.00	16 hrs	16 hrs
1 day	Rs 24,000.00	8 hrs	8 hrs
0 days	Rs 200,000.00	0 hrs	0 hrs
1 day	Rs 24,000.00	8 hrs	8 hrs

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

ID	Task Mode	WBS	Task Name	Start	Finish	Duration	Predecessors	Baseline Start
40	✓	1.2.5.4	Design preparation of building completed	Wed 11/9/16	Wed 11/9/16	0 days	39	Wed 11/9/16
41		1.3	Execution	Wed 11/9/16	Fri 3/3/17	82 days		Wed 11/9/16
42		1.3.1	Building Construction	Wed 11/9/16	Fri 2/3/17	62 days		Wed 11/9/16
43	✓	1.3.1.1	Rooms Preparation	Wed 11/9/16	Wed 11/9/160 days	39		Wed 11/9/16
44	✓	1.3.1.2	Generators Hall Preparation	Wed 11/9/16	Wed 11/9/16	0 days	40	Wed 11/9/16
45	✓	1.3.1.3	Ventilation work of Generator Hall	Wed 11/9/16	Wed 11/9/16	0 days	44	Wed 11/9/16
46	✓	1.3.1.4	Construction of Gensets foundations	Fri 1/13/17	Wed 1/18/17	0 days	45	Fri 1/13/17
47		1.3.1.5	Installation of Crane in Generator Hall	Thu 1/19/17	Wed 1/25/17	5 days	46	Thu 1/19/17
48		1.3.1.6	Construction of fuel tanks area	Thu 1/26/17	Mon 1/30/17	3 days	47	Thu 1/26/17
49		1.3.1.7	Resolution of remaining issues in construction	Tue 1/31/17	Fri 2/3/17	4 days	48	Tue 1/31/17
50		1.3.1.8	Completion and handover of building	Fri 2/3/17	Fri 2/3/17	0 days	49	Fri 2/3/17
51		1.3.2	Generators Commissioning	Tue 1/3/17	Thu 1/19/17	13 days		Tue 1/3/17
52	✓	1.3.2.1	Unloading of Gensets	Tue 1/3/17	Tue 1/3/17	1 day	29	Tue 1/3/17
53	✓	1.3.2.2	Mounting of Gensets	Wed 1/4/17	Wed 1/4/17	1 day	52	Wed 1/4/17
54	✓	1.3.2.3	PDI of Gensets	Thu 1/5/17	Thu 1/5/17	1 day	53	Thu 1/5/17
55	✓	1.3.2.4	Assembling of loose parts with Generators	Fri 1/6/17	Fri 1/6/17	4 hrs	54	Fri 1/6/17
56	✓	1.3.2.5	Installation and Erection of both Generators	Fri 1/6/17	Fri 1/6/17	4 hrs	55	Fri 1/6/17
57	✓	1.3.2.6	Engine Tests performing after shipment	Mon 1/9/17	Mon 1/9/17	2 hrs	56	Mon 1/9/17

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

Baseline Finish	Baseline Estimated Duration	% Complete	Cost	Resource Names	Total Slack	Actual Start	Actual Finish
Wed 11/9/16	0 days	100%	Rs 0.00		0 days	Wed 11/9/16	Wed 11/9/16
Fri 3/3/17	82 days	14%	Rs 17,941,000.00		0 days	Wed 11/9/16	NA
Fri 2/3/17	62 days	0%	Rs 15,520,000.00		20 days	Wed 11/9/16	NA
Wed 11/9/16	0 days	100%	Rs 5,000,000.00	Civil Work Vendor[Rs	0 days	Wed 11/9/16	Wed 11/9/16
Wed 11/9/16	0 days	100%	Rs 5,000,000.00	Civil Work Vendor[Rs	0 days	Wed 11/9/16	Wed 11/9/16
Wed 11/9/16	0 days	100%	Rs 5,000,000.00	HVAC Vendor[Rs 5,000,000.00]	0 days	Wed 11/9/16	Wed 11/9/16
Wed 1/18/17	0 days	100%	Rs 0.00	Civil Work Vendor	0 days	Fri 1/13/17	Wed 1/18/17
Wed 1/25/17	5 days	0%	Rs 320,000.00	Installation Engineers,Civil Work	20 days	NA	NA
Mon 1/30/17	3 days	0%	Rs 200,000.00	Civil Work Vendor[Rs	20 days	NA	NA
Fri 2/3/17	4 days	0%	Rs 0.00	Civil Work Vendor	20 days	NA	NA
Fri 2/3/17	0 days	0%	Rs 0.00		20 days	NA	NA
Thu 1/19/17	13 days	65%	Rs 701,000.00		0 days	Tue 1/3/17	NA
Tue 1/3/17	1 day	100%	Rs 224,000.00	Civil Work Vendor, In	0 days	Tue 1/3/17	Tue 1/3/17
Wed 1/4/17	1 day	100%	Rs 24,000.00	Installation Engineers	0 days	Wed 1/4/17	Wed 1/4/17
Thu 1/5/17	1 day	100%	Rs 48,000.00	Electrical Engineers T	0 days	Thu 1/5/17	Thu 1/5/17
Fri 1/6/17	0.5 days	100%	Rs 24,000.00	Electrical Engineers Team,Mechanical	0 hrs	Fri 1/6/17	Fri 1/6/17
Fri 1/6/17	0.5 days	100%	Rs 24,000.00	Installation Engineers,Mechanical Engineers Team	0 hrs	Fri 1/6/17	Fri 1/6/17
Mon 1/9/17	0.25 days	100%	Rs 12,000.00	Electrical Engineers Team,Mechanical Engineers Team	0 hrs	Mon 1/9/17	Mon 1/9/17

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

Actual Duration	Actual Cost	Work	Actual Work
0 days	Rs 0.00	0 hrs	0 hrs
11.28 days	Rs 15,503,000.00	408 hrs	86 hrs
0 days	Rs 15,000,000.00	40 hrs	0 hrs
0 days	Rs 5,000,000.00	0 hrs	0 hrs
0 days	Rs 5,000,000.00	0 hrs	0 hrs
0 days	Rs 5,000,000.00	0 hrs	0 hrs
0 days	Rs 5,000,000.00	0 hrs	0 hrs
0 days	Rs 0.00	0 hrs	0 hrs
0 days	Rs 0.00	40 hrs	0 hrs
0 days	Rs 0.00	0 hrs	0 hrs
0 days	Rs 0.00	0 hrs	0 hrs
0 days	Rs 0.00	0 hrs	0 hrs
8.48 days	Rs 503,000.00	152 hrs	86 hrs
1 day	Rs 224,000.00	8 hrs	8 hrs
1 day	Rs 24,000.00	8 hrs	8 hrs
1 day	Rs 48,000.00	16 hrs	16 hrs
4 hrs	Rs 24,000.00	8 hrs	8 hrs
4 hrs	Rs 24,000.00	8 hrs	8 hrs
2 hrs	Rs 12,000.00	4 hrs	4 hrs

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

ID	Task Mode	WBS	Task Name	Start	Finish	Duration	Predecessors	Baseline Start
58		1.3.2.7	Coolant filling	Mon 1/9/17	Mon 1/9/17	2 hrs	57	Mon 1/9/17
59		1.3.2.8	Fuel purging of lines	Mon 1/9/17	Mon 1/9/17	4 hrs	58	Mon 1/9/17
60		1.3.2.9	Oil purging of both Gensets	Tue 1/10/17	Tue 1/10/17	4 hrs	59	Tue 1/10/17
61		1.3.2.10	Megger test performing of both gensets	Tue 1/10/17	Tue 1/10/17	4 hrs	60	Tue 1/10/17
62		1.3.2.11	Fuel testing	Wed 1/11/17	Wed 1/11/17	170 hrs	61	Wed 1/11/17
63		1.3.2.12	Coolant Testing	Wed 1/11/17	Wed 1/11/17	170 hrs	62	Wed 1/11/17
64		1.3.2.13	Engine oil Sampling	Thu 1/12/17	Thu 1/12/17	0 hrs	63	Thu 1/12/17
65		1.3.2.14	Termination verification from Genset to Control Panel of both gensets	Thu 1/12/17	Thu 1/12/17	4 hrs	64	Thu 1/12/17
66		1.3.2.15	Earthing test	Fri 1/13/17	Fri 1/13/17	1 day	65	Fri 1/13/17
67		1.3.2.16	Electrical connections and energising the gensets	Mon 1/16/17	Mon 1/16/17	4 hrs	66	Mon 1/16/17
68		1.3.2.17	Gensets Panels testing	Mon 1/16/17	Mon 1/16/17	174 hrs	67	Mon 1/16/17
69		1.3.2.18	Adjusting parameters	Tue 1/17/17	Tue 1/17/17	4 hrs	68	Tue 1/17/17
70		1.3.2.19	Soft Start of both Gensets	Tue 1/17/17	Tue 1/17/17	4 hrs	69	Tue 1/17/17
71		1.3.2.20	Start from remote control panels	Wed 1/18/17	Wed 1/18/17	2 hrs	70	Wed 1/18/17
72		1.3.2.21	Safety Testing	Wed 1/18/17	Wed 1/18/17	1 hr	71	Wed 1/18/17
73		1.3.2.22	Performing final load test	Wed 1/18/17	Wed 1/18/17	1 hr	72	Wed 1/18/17
74		1.3.2.23	100% Load test performing	Wed 1/18/17	Wed 1/18/17	4 hrs	73	Wed 1/18/17
75		1.3.2.24	Generator Commissioning finalization	Thu 1/19/17	Thu 1/19/17	1 day	74	Thu 1/19/17

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

Baseline Finish	Baseline Estimated Duration	% Complete	Cost	Resource Names	Total Slack	Actual Start	Actual Finish
Mon 1/9/17	0.25 days	100%	Rs 6,000.00	Mechanical Engineer	0 hrs	Mon 1/9/17	Mon 1/9/17
Mon 1/9/17	0.5 days	100%	Rs 12,000.00	Mechanical Engineer	0 hrs	Mon 1/9/17	Mon 1/9/17
Tue 1/10/17	0.5 days	100%	Rs 12,000.00	Mechanical Engineers Team	0 hrs	Tue 1/10/17	Tue 1/10/17
Tue 1/10/17	0.5 days	100%	Rs 12,000.00	Electrical Engineers Team	0 hrs	Tue 1/10/17	Tue 1/10/17
Wed 1/11/17	0 days	100%	Rs 15,000.00	Lab Tests [Rs 15,000.	0 hrs	Wed 1/11/17	Wed 1/11/17
Wed 1/11/17	0 days	100%	Rs 15,000.00	Lab Tests [Rs 15,000.	0 hrs	Wed 1/11/17	Wed 1/11/17
Thu 1/12/17	0 days	100%	Rs 15,000.00	Lab Tests [Rs 15,000.	0 hrs	Thu 1/12/17	Thu 1/12/17
Thu 1/12/17	0.5 days	100%	Rs 12,000.00	Wiring and Termination Team	0 hrs	Thu 1/12/17	Thu 1/12/17
Fri 1/13/17	1 day	100%	Rs 48,000.00	Electrical Engineers T	0 days	Fri 1/13/17	Fri 1/13/17
Mon 1/16/17	0.5 days	0%	Rs 24,000.00	Electrical Engineers Team, Wiring and Termination Team	0 hrs	NA	NA
Mon 1/16/17	0.5 days	0%	Rs 12,000.00	Electrical Engineers T	0 hrs	NA	NA
Tue 1/17/17	0.5 days	0%	Rs 12,000.00	Electrical Engineers T	0 hrs	NA	NA
Tue 1/17/17	0.5 days	0%	Rs 24,000.00	Electrical Engineers Team, Mechanical	0 hrs	NA	NA
Wed 1/18/17	0.25 days	0%	Rs 6,000.00	Electrical Engineers Team, EnerCon	0 hrs	NA	NA
Wed 1/18/17	0.13 days	0%	Rs 6,000.00	Electrical Engineers T	0 hrs	NA	NA
Wed 1/18/17	0.13 days	0%	Rs 6,000.00	Electrical Engineers Team, Mechanical	0 hrs	NA	NA
Wed 1/18/17	0.5 days	0%	Rs 36,000.00	Electrical Engineers Team, EnerCon	0 hrs	NA	NA
Thu 1/19/17	1 day	0%	Rs 72,000.00	Electrical Engineers Team, Mechanical Engineers	0 days	NA	NA

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

Actual Duration	Actual Cost	Work	Actual Work
2 hrs	Rs 6,000.00	2 hrs	2 hrs
4 hrs	Rs 12,000.00	4 hrs	4 hrs
4 hrs	Rs 12,000.00	4 hrs	4 hrs
4 hrs	Rs 12,000.00	4 hrs	4 hrs
0 hrs	Rs 15,000.00	0 hrs	0 hrs
0 hrs	Rs 15,000.00	0 hrs	0 hrs
0 hrs	Rs 15,000.00	0 hrs	0 hrs
4 hrs	Rs 12,000.00	4 hrs	4 hrs
1 day	Rs 48,000.00	16 hrs	16 hrs
0 hrs	Rs 0.00	8 hrs	0 hrs
0 hrs	Rs 0.00	4 hrs	0 hrs
0 hrs	Rs 0.00	4 hrs	0 hrs
0 hrs	Rs 0.00	8 hrs	0 hrs
0 hrs	Rs 0.00	2 hrs	0 hrs
0 hrs	Rs 0.00	2 hrs	0 hrs
0 hrs	Rs 0.00	2 hrs	0 hrs
0 hrs	Rs 0.00	12 hrs	0 hrs
0 days	Rs 0.00	24 hrs	0 hrs

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

ID	Task Mode	WBS	Task Name	Start	Finish	Duration	Predecessors	Baseline Start
76		1.3.2.25	Successful Commissioned Generators	Thu 1/19/17	Thu 1/19/17	0 days	75	Thu 1/19/17
77		1.3.3	Control panels installation	Fri 1/20/17	Fri 1/27/17	6 days		Fri 1/20/17
78		1.3.3.1	PDI of Panels	Fri 1/20/17	Fri 1/20/17	4 hrs	76	Fri 1/20/17
79		1.3.3.2	Termination of MV panels	Fri 1/20/17	Fri 1/20/17	2 hrs	78	Fri 1/20/17
80		1.3.3.3	Termination of ENERCON Control Panels	Fri 1/20/17	Fri 1/20/17	2 hrs	79	Fri 1/20/17
81		1.3.3.4	Termination of NGR	Mon 1/23/17	Mon 1/23/17	1 day	80	Mon 1/23/17
82		1.3.3.5	Termination of Charging system circuit	Tue 1/24/17	Tue 1/24/17	1 day	81	Tue 1/24/17
83		1.3.3.6	Termination of fuel tanks controlling system	Wed 1/25/17	Wed 1/25/17	4 hrs	82	Wed 1/25/17
84		1.3.3.7	Termination of J/w heater circuit	Wed 1/25/17	Wed 1/25/17	4 hrs	83	Wed 1/25/17
85		1.3.3.8	NGR inspection	Thu 1/26/17	Thu 1/26/17	4 hrs	84	Thu 1/26/17
86		1.3.3.9	Wiring verification of auxiliary circuits	Thu 1/26/17	Thu 1/26/17	4 hrs	85	Thu 1/26/17
87		1.3.3.10	wiring verification of fuel controlling system	Fri 1/27/17	Fri 1/27/17	2 hrs	86	Fri 1/27/17
88		1.3.3.11	Wiring verification of MV Panels	Fri 1/27/17	Fri 1/27/17	2 hrs	87	Fri 1/27/17
89		1.3.3.12	Verification of Control panels wiring	Fri 1/27/17	Fri 1/27/17	2 hrs	88	Fri 1/27/17
90		1.3.3.13	Energising the panels	Fri 1/27/17	Fri 1/27/17	1 hr	89	Fri 1/27/17
91		1.3.3.14	Settings adjustments as per requirement	Fri 1/27/17	Fri 1/27/17	1 hr	90	Fri 1/27/17
92		1.3.3.15	Panels installed finalized	Fri 1/27/17	Fri 1/27/17	0 days	91	Fri 1/27/17

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

Baseline Finish	Baseline Estimated Duration	% Complete	Cost	Resource Names	Total Slack	Actual Start	Actual Finish
Thu 1/19/17	0 days	0%	Rs 0.00		0 days	NA	NA
Fri 1/27/17	6 days	0%	Rs 278,000.00		0 days	NA	NA
Fri 1/20/17	0.5 days	0%	Rs 20,000.00	EnerCon Team[Rs 20	0 hrs	NA	NA
Fri 1/20/17	0.25 days	0%	Rs 20,000.00	EnerCon Team[Rs 20,000.00]	0 hrs	NA	NA
Fri 1/20/17	0.25 days	0%	Rs 20,000.00	EnerCon Team[Rs 20,000.00]	0 hrs	NA	NA
Mon 1/23/17	1 day	0%	Rs 24,000.00	Wiring and Termination Team	0 days	NA	NA
Tue 1/24/17	1 day	0%	Rs 48,000.00	Electrical Engineers Team, Wiring and Termination Team	0 days	NA	NA
Wed 1/25/17	0.5 days	0%	Rs 24,000.00	Electrical Engineers Team, Wiring and Termination Team	0 hrs	NA	NA
Wed 1/25/17	0.5 days	0%	Rs 24,000.00	Electrical Engineers Team, Wiring and Termination Team	0 hrs	NA	NA
Thu 1/26/17	0.5 days	0%	Rs 12,000.00	Electrical Engineers Team, Wiring and Termination Team	0 hrs	NA	NA
Thu 1/26/17	0.5 days	0%	Rs 24,000.00	Electrical Engineers Team, Wiring and Termination Team	0 hrs	NA	NA
Fri 1/27/17	0.25 days	0%	Rs 12,000.00	Electrical Engineers Team, Wiring and Termination Team	0 hrs	NA	NA
Fri 1/27/17	0.25 days	0%	Rs 12,000.00	Electrical Engineers Team, Wiring and Termination Team	0 hrs	NA	NA
Fri 1/27/17	0.25 days	0%	Rs 12,000.00	Electrical Engineers Team, Wiring and Termination Team	0 hrs	NA	NA
Fri 1/27/17	0.13 days	0%	Rs 23,000.00	Electrical Engineers Team, Wiring and Termination Team	0 hrs	NA	NA
Fri 1/27/17	0.13 days	0%	Rs 3,000.00	Electrical Engineers Team	0 hrs	NA	NA
Fri 1/27/17	0 days	0%	Rs 0.00		0 days	NA	NA

Actual Duration	Actual Cost	Work	Actual Work
0 days	Rs 0.00	0 hrs	0 hrs
0 days	Rs 0.00	66 hrs	0 hrs
0 hrs	Rs 0.00	0 hrs	0 hrs
0 hrs	Rs 0.00	0 hrs	0 hrs
0 hrs	Rs 0.00	0 hrs	0 hrs
0 days	Rs 0.00	8 hrs	0 hrs
0 days	Rs 0.00	16 hrs	0 hrs
0 hrs	Rs 0.00	8 hrs	0 hrs
0 hrs	Rs 0.00	8 hrs	0 hrs
0 hrs	Rs 0.00	4 hrs	0 hrs
0 hrs	Rs 0.00	4 hrs	0 hrs
0 hrs	Rs 0.00	4 hrs	0 hrs
0 hrs	Rs 0.00	1 hr	0 hrs
0 hrs	Rs 0.00	1 hr	0 hrs
0 days	Rs 0.00	0 hrs	0 hrs

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

ID	Task Mode	WBS	Task Name	Start	Finish	Duration	Predecessors	Baseline Start
93		1.3.4	Fork Lifter Commissioning	Mon 1/30/17	Wed 2/1/17	3 days		Mon 1/30/17
94		1.3.4.1	Unloading of fork lifter at site	Mon 1/30/17	Mon 1/30/17	1 day	92	Mon 1/30/17
95		1.3.4.2	PDI of fork Lifter	Tue 1/31/17	Tue 1/31/17	4 hrs	94	Tue 1/31/17
96		1.3.4.3	Assembling of loose parts	Tue 1/31/17	Tue 1/31/17	4 hrs	95	Tue 1/31/17
97		1.3.4.4	Coolant and fuel filling	Wed 2/1/17	Wed 2/1/17	2 hrs	96	Wed 2/1/17
98		1.3.4.5	Load test of fork lifter	Wed 2/1/17	Wed 2/1/17	6 hrs	97	Wed 2/1/17
99		1.3.4.6	Fork lifter commissioning Completed	Wed 2/1/17	Wed 2/1/17	0 days	98	Wed 2/1/17
100		1.3.5	Project Status update	Thu 2/2/17	Fri 3/3/17	22 days		Thu 2/2/17
101		1.3.5.1	Reports making	Thu 2/2/17	Wed 2/8/17	5 days		Thu 2/2/17
102		1.3.5.1.1	Compilation of data collected during execution	Thu 2/2/17	Fri 2/3/17	2 days	99	Thu 2/2/17
103		1.3.5.1.2	EVM analysis performing on report	Mon 2/6/17	Mon 2/6/17	1 day	102	Mon 2/6/17
104		1.3.5.1.3	lessons learned and experiences logging in OPA	Tue 2/7/17	Tue 2/7/17	1 day	103	Tue 2/7/17
105		1.3.5.1.4	meeting with stakeholders, briefing of information	Wed 2/8/17	Wed 2/8/17	1 day	104	Wed 2/8/17
106		1.3.5.2	Training and handover the Project	Thu 2/9/17	Fri 3/3/17	17 days		Thu 2/9/17
107		1.3.5.2.1	Training of PR staff	Thu 2/9/17	Tue 2/28/17	14 days	105	Thu 2/9/17

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

Baseline Finish	Baseline Estimated Duration	% Complete	Cost	Resource Names	Total Slack	Actual Start	Actual Finish
Wed 2/1/17	3 days	0%	Rs 114,000.00		0 days	NA	NA
Mon 1/30/17	1 day	0%	Rs 24,000.00	Installation Engineers	0 days	NA	NA
Tue 1/31/17	0.5 days	0%	Rs 24,000.00	Electrical Engineers T	0 hrs	NA	NA
Tue 1/31/17	0.5 days	0%	Rs 24,000.00	Electrical Engineers T Team,Mechanical	0 hrs	NA	NA
Wed 2/1/17	0.25 days	0%	Rs 6,000.00	Installation Engineers	0 hrs	NA	NA
Wed 2/1/17	0.75 days	0%	Rs 36,000.00	Electrical Engineers T	0 hrs	NA	NA
Wed 2/1/17	0 days	0%	Rs 0.00		0 days	NA	NA
Fri 3/3/17	22 days	0%	Rs 1,328,000.00		0 days	NA	NA
Wed 2/8/17	5 days	0%	Rs 160,000.00		0 days	NA	NA
Fri 2/3/17	2 days	0%	Rs 48,000.00	Project Management Team	0 days	NA	NA
Mon 2/6/17	1 day	0%	Rs 24,000.00	Project Management Team	0 days	NA	NA
Tue 2/7/17	1 day	0%	Rs 24,000.00	Project Management Team	0 days	NA	NA
Wed 2/8/17	1 day	0%	Rs 64,000.00	Project Management Team,Project Manager,PR Staff	0 days	NA	NA
Fri 3/3/17	17 days	0%	Rs 1,168,000.00		0 days	NA	NA
Tue 2/28/17	14 days	0%	Rs 1,000,000.00	Trainer[Rs 1,000,000	0 days	NA	NA

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

Actual Duration	Actual Cost	Work	Actual Work
0 days	Rs 0.00	38 hrs	0 hrs
0 days	Rs 0.00	8 hrs	0 hrs
0 hrs	Rs 0.00	8 hrs	0 hrs
0 hrs	Rs 0.00	8 hrs	0 hrs
0 hrs	Rs 0.00	2 hrs	0 hrs
0 hrs	Rs 0.00	12 hrs	0 hrs
0 days	Rs 0.00	0 hrs	0 hrs
0 days	Rs 0.00	112 hrs	0 hrs
0 days	Rs 0.00	56 hrs	0 hrs
0 days	Rs 0.00	16 hrs	0 hrs
0 days	Rs 0.00	8 hrs	0 hrs
0 days	Rs 0.00	8 hrs	0 hrs
0 days	Rs 0.00	24 hrs	0 hrs
0 days	Rs 0.00	56 hrs	0 hrs
0 days	Rs 0.00	0 hrs	0 hrs

ID	Task Mode	WBS	Task Name	Start	Finish	Duration	Predecessors	Baseline Start
108		1.3.5.2.2	Formally handing over of the operations to PR staff	Wed 3/1/17	Wed 3/1/17	1 day	107	Wed 3/1/17
109		1.3.5.2.3	Logging of information	Thu 3/2/17	Thu 3/2/17	1 day	108	Thu 3/2/17
110		1.3.5.2.4	Final load test of power house	Fri 3/3/17	Fri 3/3/17	4 hrs	109	Fri 3/3/17
111		1.3.5.2.5	Certificates of training distribution	Fri 3/3/17	Fri 3/3/17	4 hrs	110	Fri 3/3/17
112		1.3.5.2.6	closing of Project	Fri 3/3/17	Fri 3/3/17	0 hrs	111	Fri 3/3/17

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

Baseline Finish	Baseline Estimated Duration	% Complete	Cost	Resource Names	Total Slack	Actual Start	Actual Finish
Wed 3/1/17	1 day	0%	Rs 64,000.00	Project Management Team, Project Manager, PR Staff	0 days	NA	NA
Thu 3/2/17	1 day	0%	Rs 24,000.00	Project Management Team	0 days	NA	NA
Fri 3/3/17	0.5 days	0%	Rs 60,000.00	Electrical Engineers Team, EnerCon	0 hrs	NA	NA
Fri 3/3/17	0.5 days	0%	Rs 20,000.00	PR Staff, Project Manager	0 hrs	NA	NA
Fri 3/3/17	0 days	0%	Rs 0.00		0 hrs	NA	NA

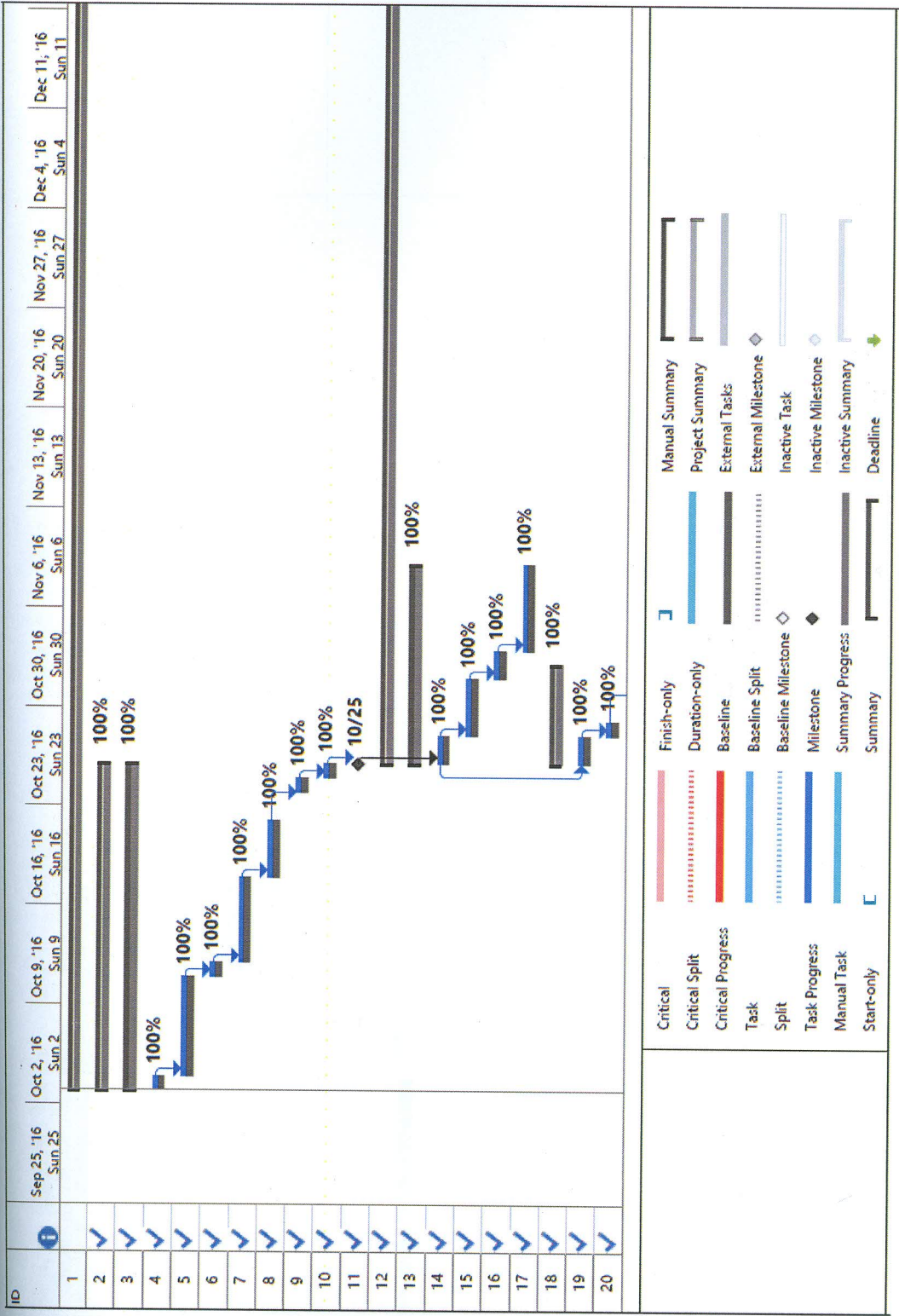
Actual Duration	Actual Cost	Work	Actual Work
0 days	Rs 0.00	24 hrs	0 hrs
0 days	Rs 0.00	8 hrs	0 hrs
0 hrs	Rs 0.00	16 hrs	0 hrs
0 hrs	Rs 0.00	8 hrs	0 hrs
0 hrs	Rs 0.00	0 hrs	0 hrs

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

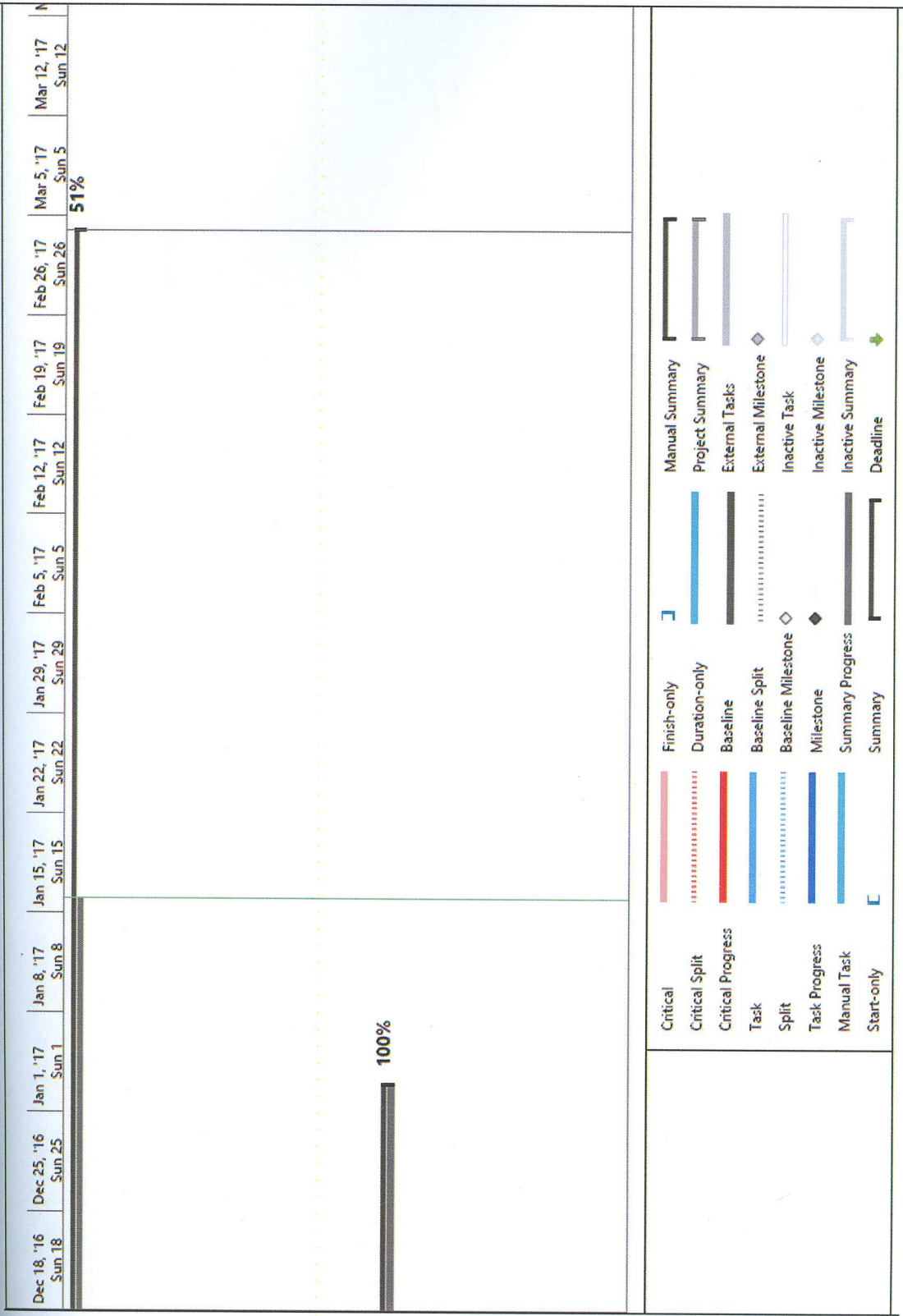
6.19 Resource Sheet

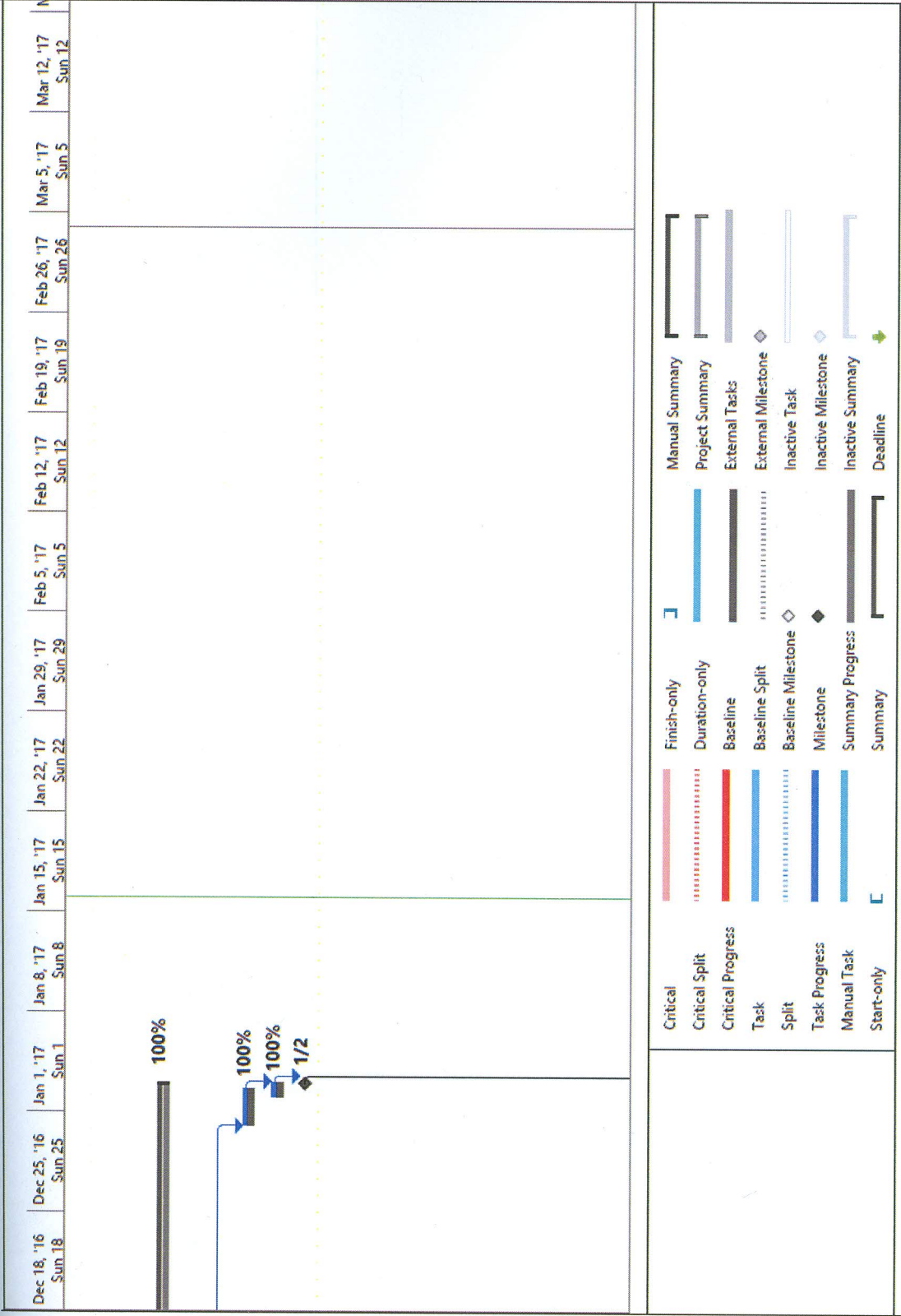
ID		Resource Name	Type	Initials	Max. Units	Std. Rate	Ovt. Rate	Base Calendar	Code
1		Project Manager	Work	P	100%	4,000.00/hr	00.00/hr	Standard	
2		Project Management Team	Work	P	200%	Rs 3,000.00/hr	Rs 00.00/hr	Standard	
3		Civil Work Vendor	Cost	C					
4		HVAC Vendor	Cost	H					
5		EnerCon Team	Cost	E					
6		Installation Engineers	Work	I	100%	Rs 3,000.00/hr	Rs 00.00/hr	Standard	
7		Wiring and Termination Team	Work	W	100%	Rs 3,000.00/hr	Rs 00.00/hr	Standard	
8		PR Staff	Work	P	100%	1,000.00/hr	00.00/hr	Standard	
9		Electrical Engineers Team	Work	E	100%	Rs 3,000.00/hr	Rs 00.00/hr	Standard	
10		Mechanical Engineers Team	Work	M	100%	Rs 3,000.00/hr	Rs 00.00/hr	Standard	
11		Delivery and Freight	Cost	D					
12		Lab Tests	Cost	L					
13		Trainer	Cost	T					
14		Generators Price	Material	G		,000,000.00			
15		Panel Price	Material	P		,000,000.00			

6.20 Tracking Gantt Chart



CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

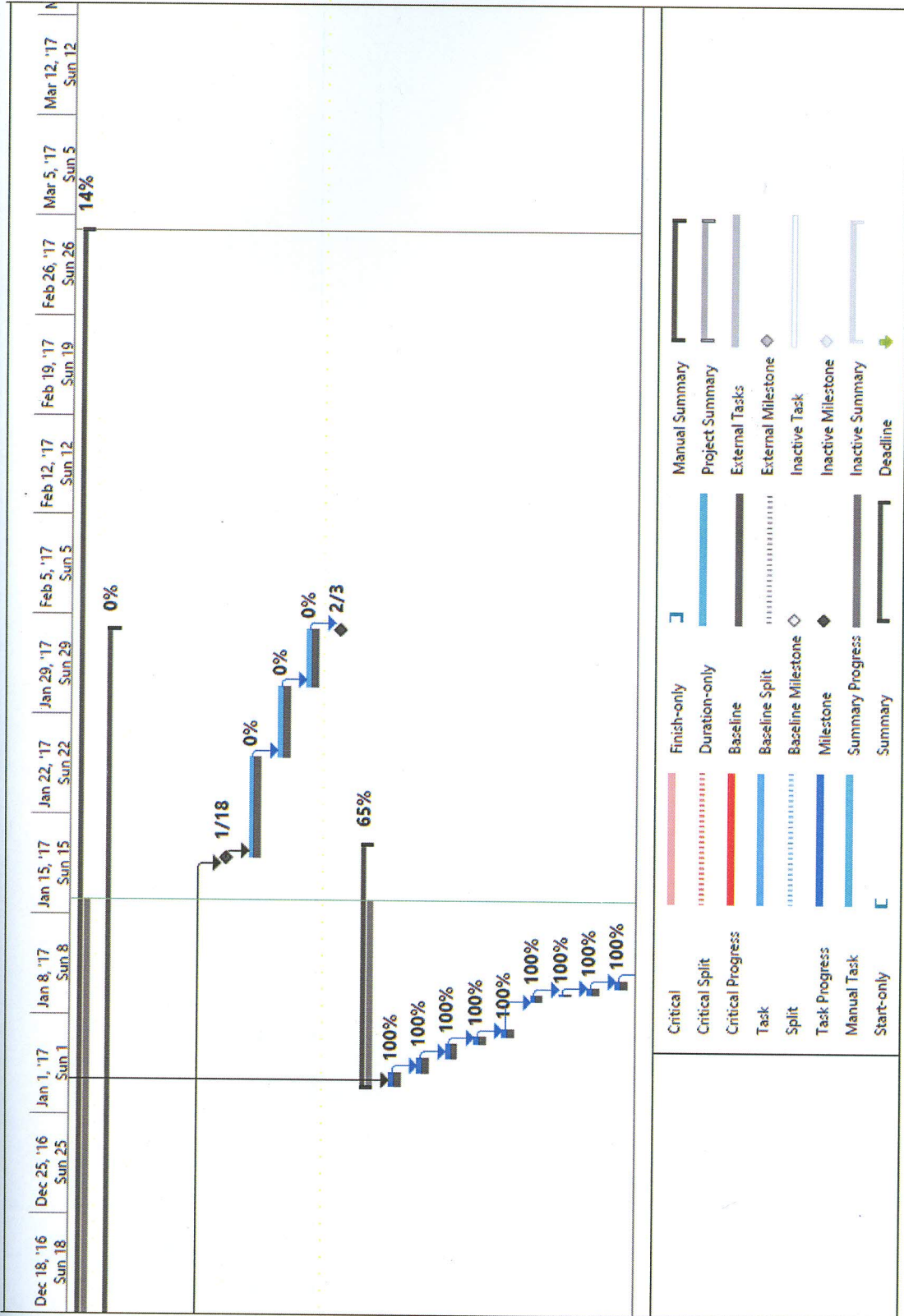




ID	Sep 25, '16 Sun 25	Oct 2, '16 Sun 2	Oct 9, '16 Sun 9	Oct 16, '16 Sun 16	Oct 23, '16 Sun 23	Oct 30, '16 Sun 30	Nov 6, '16 Sun 6	Nov 13, '16 Sun 13	Nov 20, '16 Sun 20	Nov 27, '16 Sun 27	Dec 4, '16 Sun 4	Dec 11, '16 Sun 11
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Critical		Finish-only		Manual Summary	
Critical Split		Duration-only		Project Summary	
Critical Progress		Baseline		External Tasks	
Task		Baseline Split		External Milestone	
Split		Baseline Milestone		Inactive Task	
Task Progress		Milestone		Inactive Milestone	
Manual Task		Summary Progress		Inactive Summary	
Start-only		Summary		Deadline	

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS



ID	Sep 25, '16 Sun 25	Oct 2, '16 Sun 2	Oct 9, '16 Sun 9	Oct 16, '16 Sun 16	Oct 23, '16 Sun 23	Oct 30, '16 Sun 30	Nov 6, '16 Sun 6	Nov 13, '16 Sun 13	Nov 20, '16 Sun 20	Nov 27, '16 Sun 27	Dec 4, '16 Sun 4	Dec 11, '16 Sun 11
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Manual Summary

Project Summary

External Tasks

External Milestone

Inactive Task

Inactive Milestone

Inactive Summary

Deadline

Finish-only

Duration-only

Baseline

Baseline Split

Baseline Milestone

Milestone

Summary Progress

Summary

Critical

Critical Split

Critical Progress

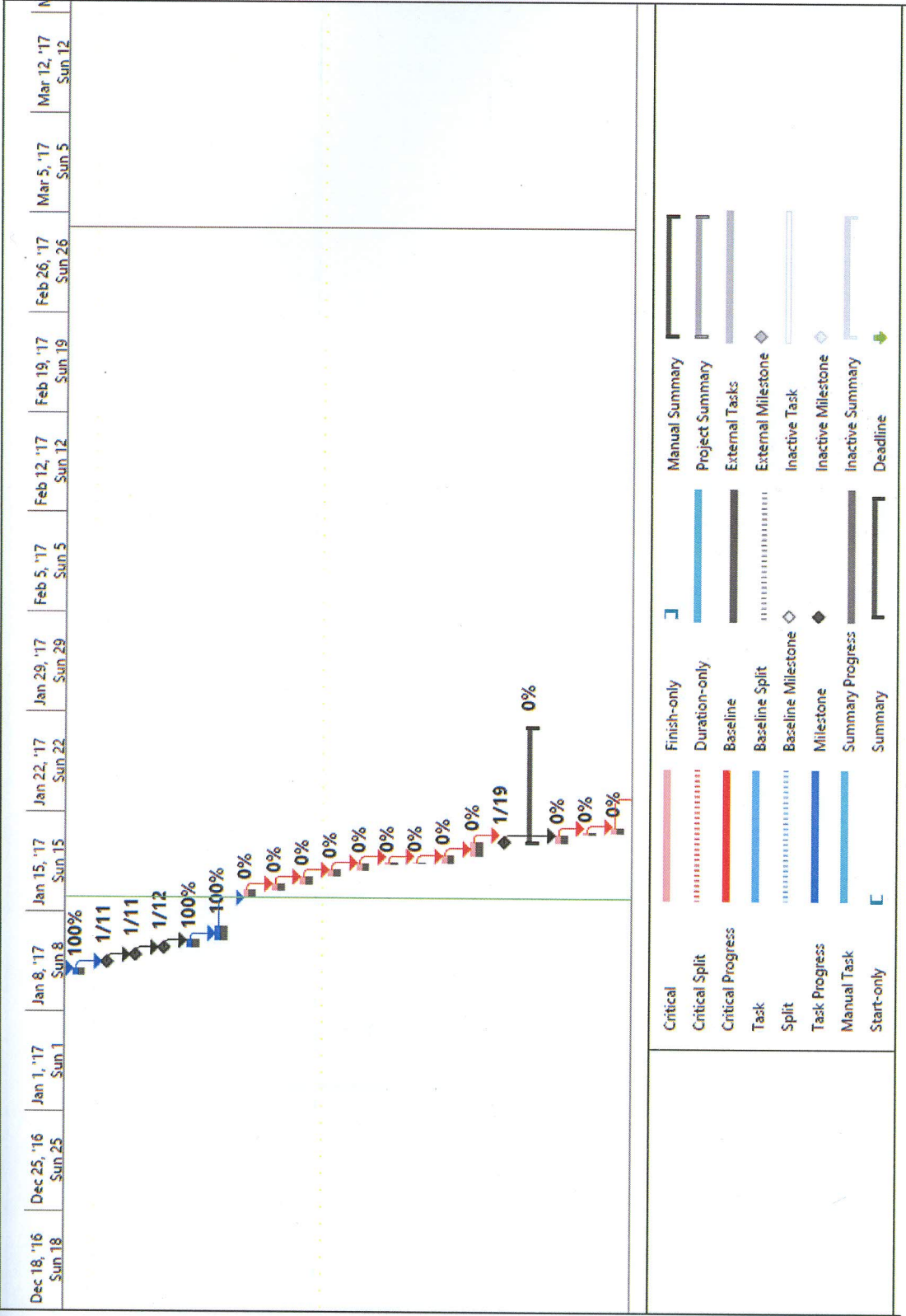
Task

Split

Task Progress

Manual Task

Start-only



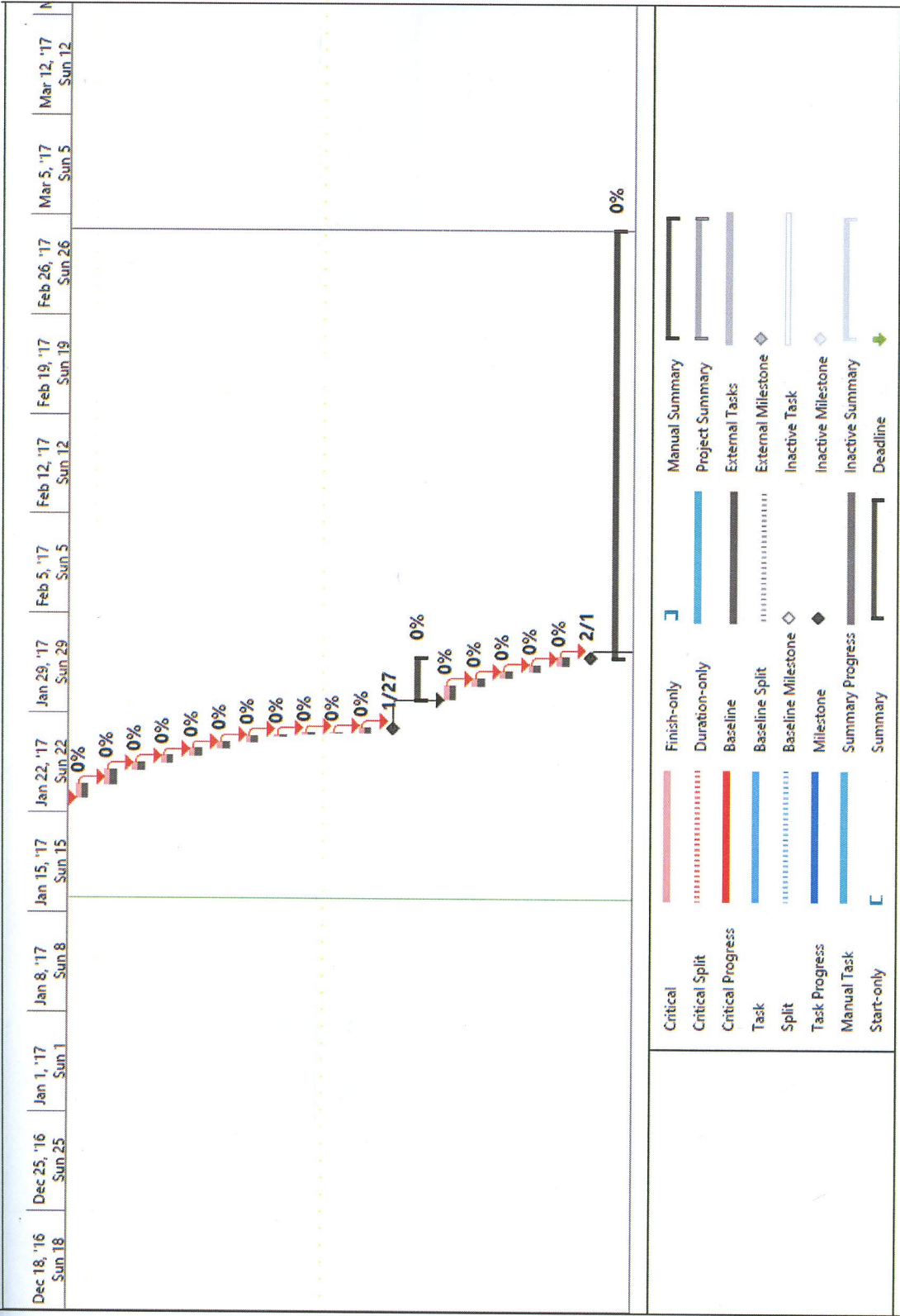
CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

ID	Sep 25, '16 Sun 25	Oct 2, '16 Sun 2	Oct 9, '16 Sun 9	Oct 16, '16 Sun 16	Oct 23, '16 Sun 23	Oct 30, '16 Sun 30	Nov 6, '16 Sun 6	Nov 13, '16 Sun 13	Nov 20, '16 Sun 20	Nov 27, '16 Sun 27	Dec 4, '16 Sun 4	Dec 11, '16 Sun 11
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Legend:

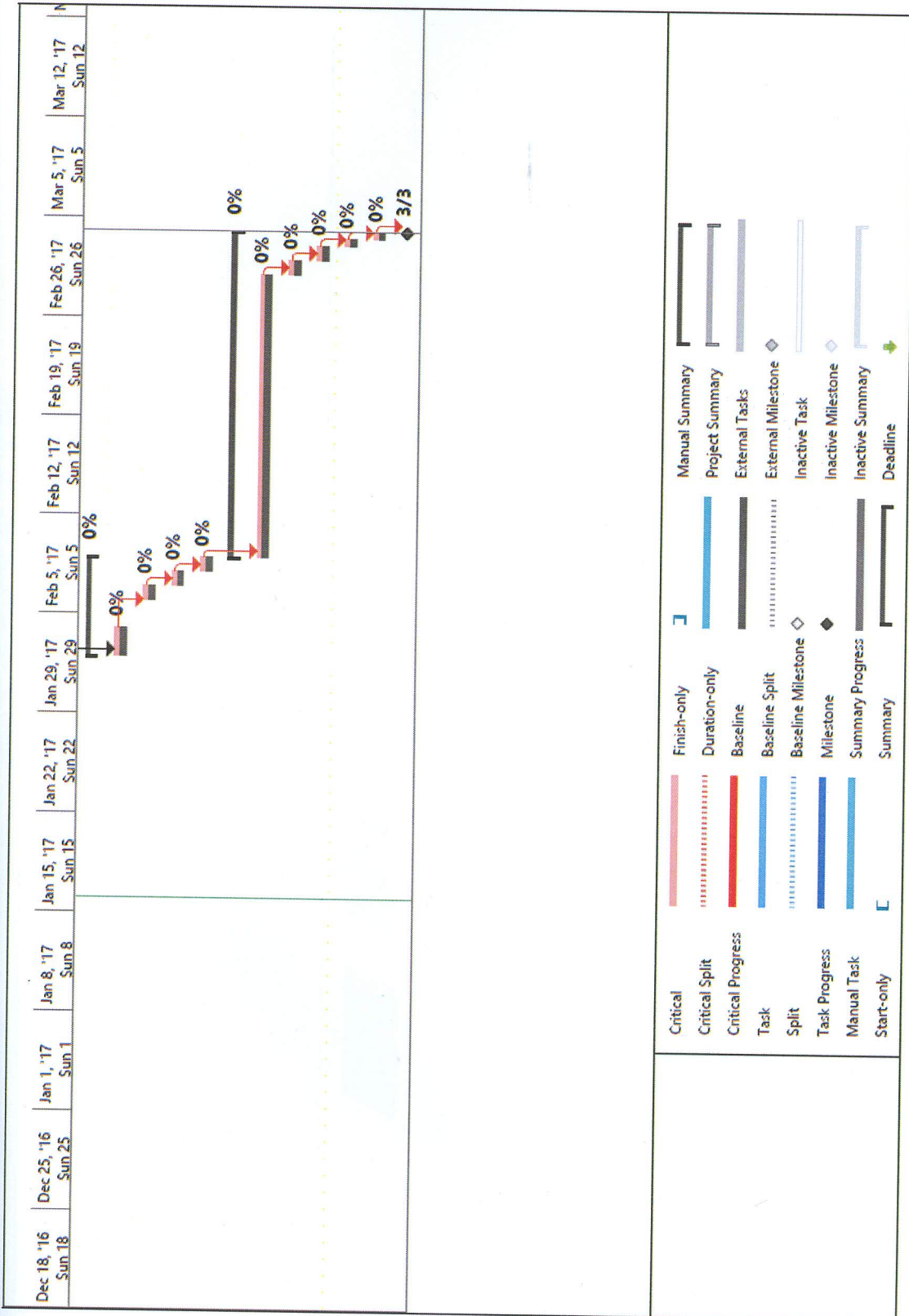
- Critical
- Critical Split
- Critical Progress
- Task
- Split
- Task Progress
- Manual Task
- Start-only
- Finish-only
- Duration-only
- Baseline
- Baseline Split
- Baseline Milestone
- Milestone
- Summary Progress
- Summary
- Manual Summary
- Project Summary
- External Tasks
- External Milestone
- Inactive Task
- Inactive Milestone
- Inactive Summary
- Deadline

CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

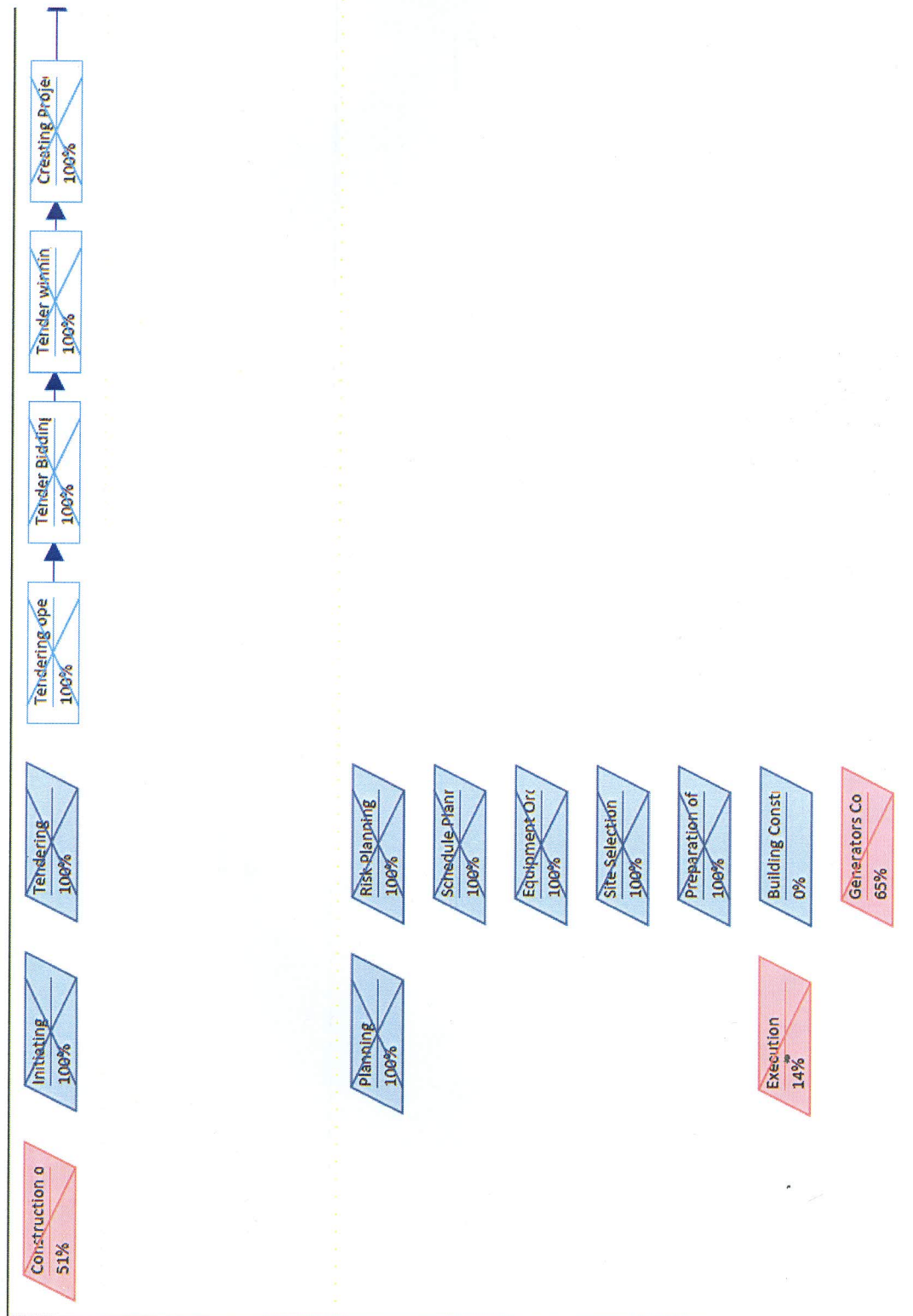


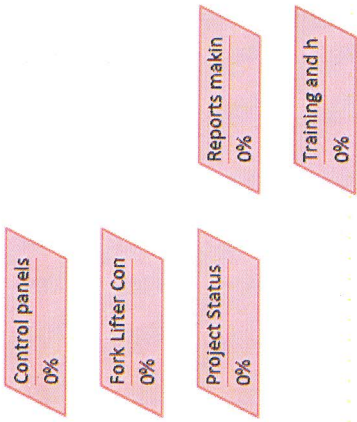
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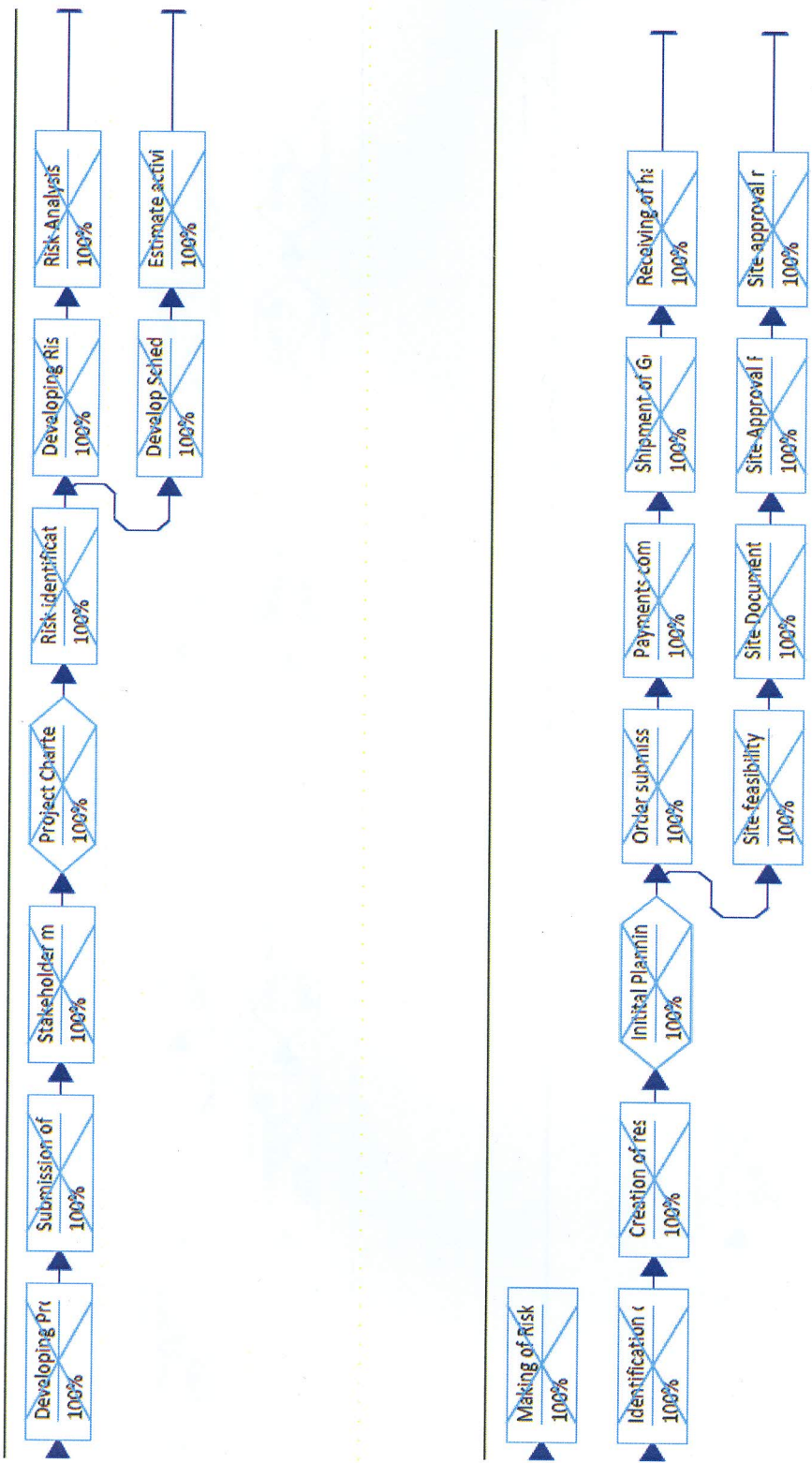
CONSTRUCTION OF POWER HOUSE PAKISTAN RAILWAYS

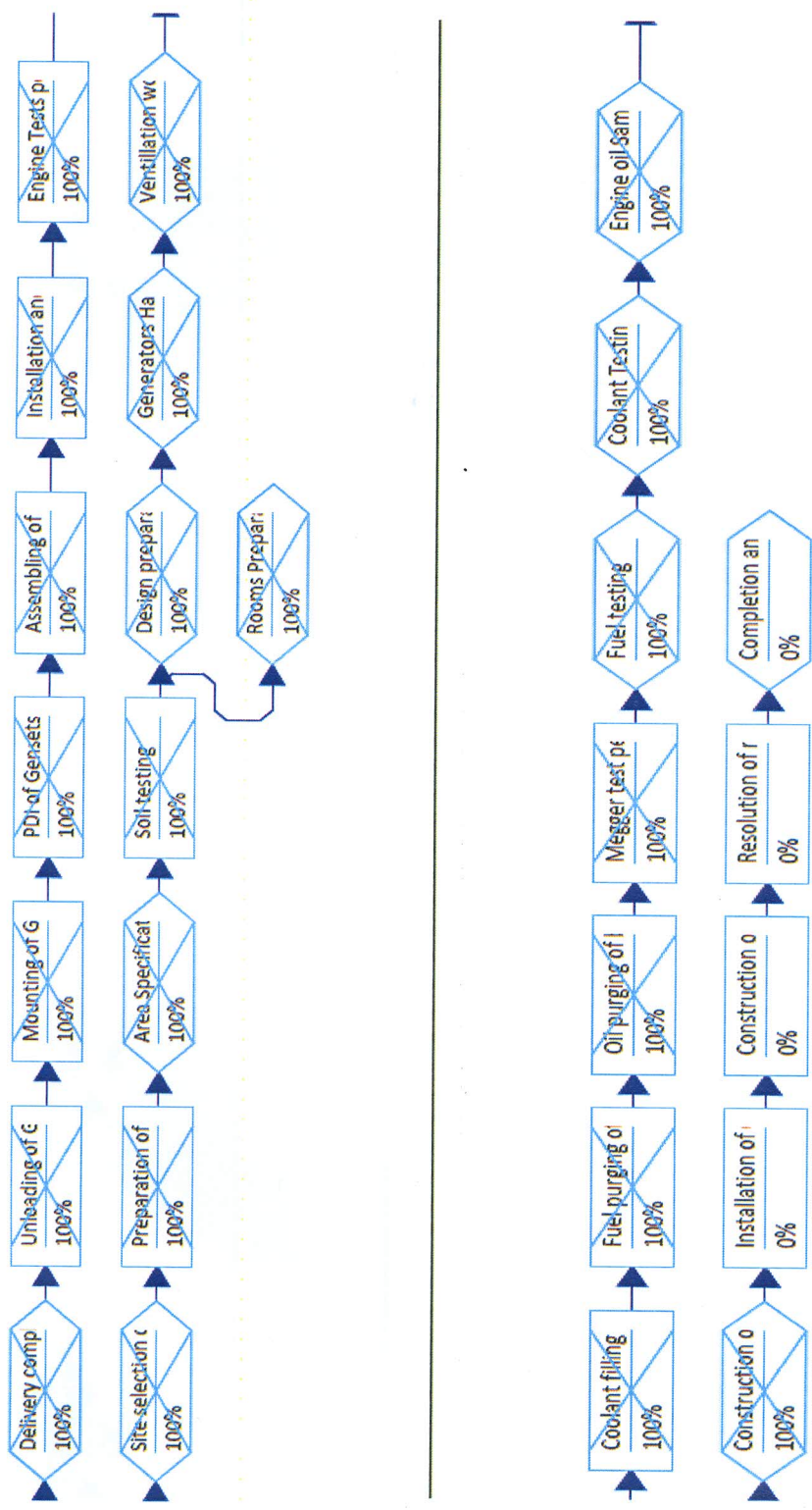


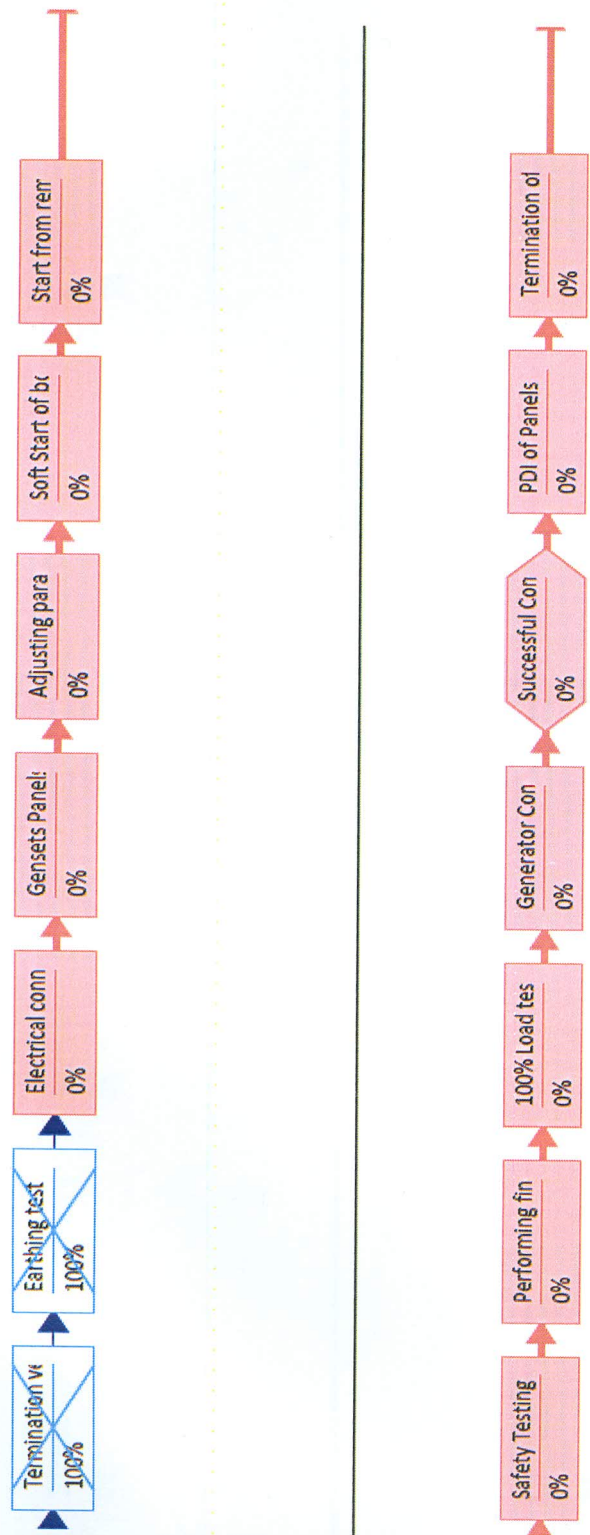
6.21 Network Diagram

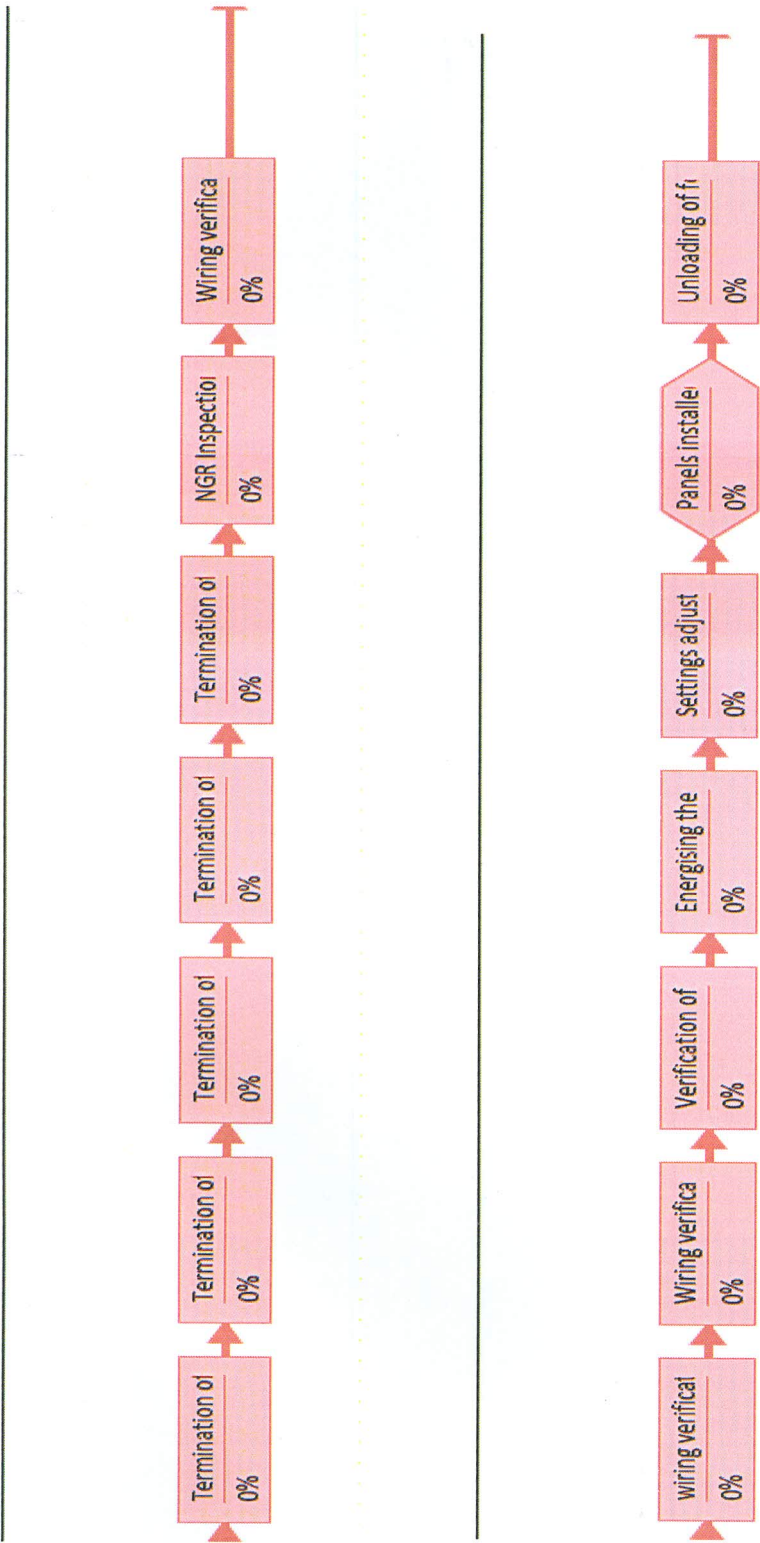


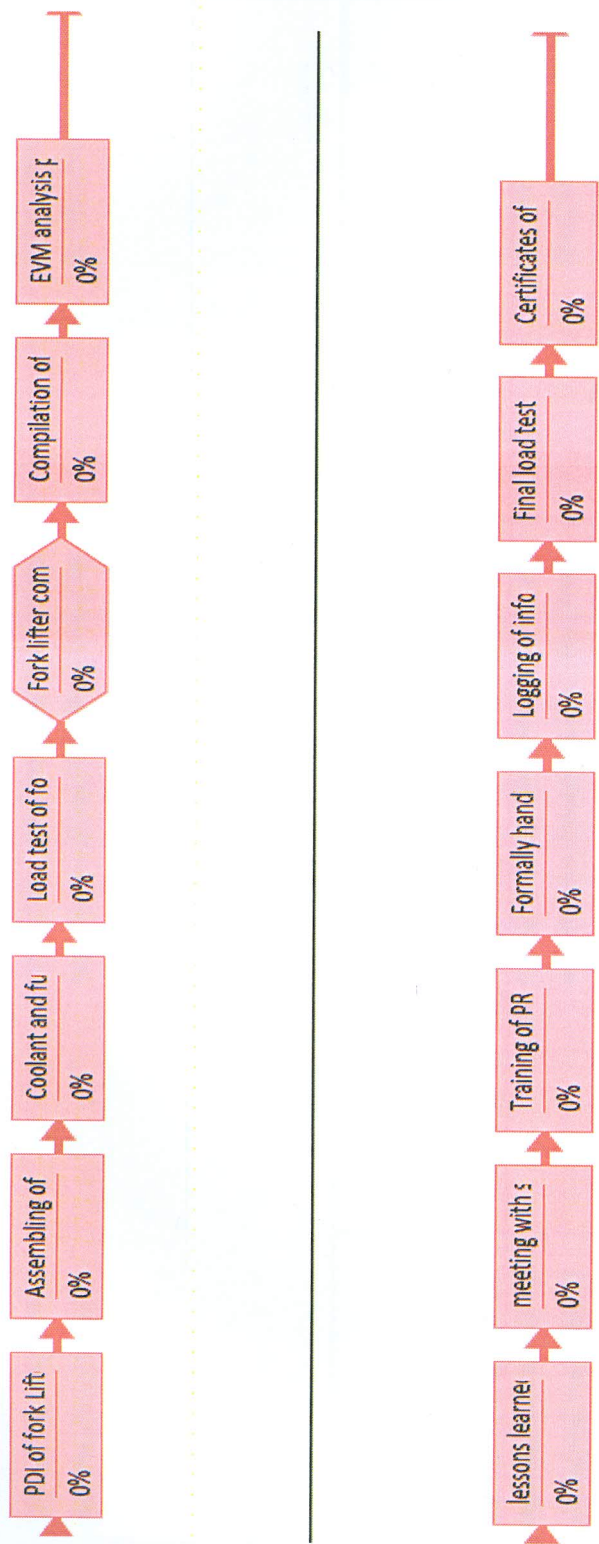












closing of Proj

0%

Project: EPM CBT MS project.m
Date: Mon 1/16/17

Critical

Noncritical

Critical Milestone

Milestone

Critical Summary

Summary

Critical Inserted

Inserted

Critical Marked

Marked

Critical External

External

Project Summary

Highlighted Critical

Highlighted Noncritical

6.22 Plagiarism Report

Risk Project by Abdul Rehman 3

ORIGINALITY REPORT

% 7	% 5	% 0	% 5
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