

## **HEL MDs Key Note address at IChE seminar on 8<sup>th</sup> July 2017.**

I feel extremely honored and privileged to be a part of this seminar on “PROJECT MANAGEMENT – OBJECTIVES AND CHALLENGES” by Indian Institute of Chemical Engineering and its associate Indian Chemical Council.

A properly aligned Project Management actually ensures that the business yields the best product/service throughout the entire life cycle of production process. This seminar, I understand, is to acknowledge and encourage this basic aspect of Project Management.

Project, can be of various types - but the common features of good Project Management are that they are :

- ✓ strategically planned,
- ✓ use resources of 3 Ms ( Man, Money and Machine)
- ✓ have a ‘Beginning’ and an ‘End’, i.e. have a Life Cycle

This means, Projects just don’t drop by chance, but are carefully thought and carried out using allocated time and resources. Working within such predetermined limits, it is the responsibility of the Project Manager to use them optimally , making the most of the available resources.

Project identification, whether it is an expansion of present capacity or an addition of an entirely new one, is the heart of the entire planning process. Scanning of current competitive environment, with analysis of market demand and supply conditions, weighing different available options for technology selection are some of the very common analysis those are done at this stage.

When we move on to the next stage, that is Project Appraisal stage – the onus is on the project management team to work on a fool-proof strategic plan. A single loophole left unaddressed at this stage, may get multiplied in subsequent stages and may become very costly in the end.

Next comes the Project Execution stage when project managers work within a limited time and with limited resources. The objective of the project manager is to complete the whole project utilizing his available resources, within specific time and without sacrificing quality.

A good project manager will do the cost benefit ratio of resource utilization at this stage only, so that he will be aware of the implications if any of his resources overshoots in future. For example, the Project Manager should be aware what might be the implication in case the project can be completed one month ahead of schedule and what amount of additional resources he can afford to allocate for that

early delivery. Efficient project management calls for these predetermined calculations carried out beforehand so that at the time of crisis the management team can take prompt and appropriate decision to the best interest of the project.

Nowadays, mostly industrial Projects are done on contract basis, with supervision through a Consultant. Thus, while working on determining the time and resources for the Project, it is of utmost importance that the Scopes of all these three partners – the Owner, Contractor and the Consultants are clearly defined.

Haldia Energy Ltd had set up and commissioned its 2X300 MW power plant in West Bengal in early 2015. The project had its own challenges and learnings. Based on the experience during execution, I would like to share a few key issues that could help the future Project Managers handling large industrial projects.

When a project actually hits ground, pre-conceived boundaries/assumptions may not remain sacrosanct. With changing ground reality, for the interest of the project itself, there has to be the preparedness for flexibility in the whole plan through regular reviews and course corrections. The Owner and the Contractor, along with the consultant should have the necessary synergy within them for such corrective actions. Fast decision making, considering changed scenario and evaluation of all possible options at that time is the key trait of a good Project Manager.

It is important that the contractors should also be treated as a stakeholder, not merely a party driven by commercial motives. The trust-building with the contractor is crucial for the Project Management team. For example, if any suggestion comes from their (contractor's) end, which actually translates to a lower cost to the contractor but faster execution for the Owner, then for the best interest of the project, it should be reviewed with due importance and accepted if deemed fit without sacrificing quality of the product.

Emergency situations calls for all round participation to meet the crisis and that what emerges as the best solution for the project has to be taken up without delay in decision making.

This flexibility is important for managing the project effectively and with efficacy.

#### Case in hand : EOT CRANE accident

The Power house EOT crane – which is required for the erection of the turbine, was flung off during a storm because the operator had not applied the brakes after his job was over for the day. This incident

threatened to jeopardize the whole project schedule as turbine erection is always on the critical path for power projects. Putting aside the discussions relating to apportioning liabilities and blame, the immediate task for all stake-holders was to address the threat to critical path and that was exactly what was done. Result was by the end of the next day all contingency plans were in place with clearly defined roles and responsibilities to salvage the situation. In the end the incident hardly had any impact in the overall execution schedule.

Project managers should also be alive and responding to situations beyond their boundary.

The case in hand was the delay in getting start-up power for HEL. The 90 km transmission line was getting delayed due to delays from land acquisition and Right of way – consequently delaying the 400 kV power connection of the plant. While erection was complete none of the High Tension motors could be tried due to non-availability of power. Having anticipated the problem in advance, the Engineers working on the project came up with major innovations to overcome the obstacle. The construction power connection was strengthened with an enhanced capacity transformer to cater to a larger load. And such equipment as the Boiler Feed pump whose motor requirements far exceeded the capability of the existing electrical system were replaced by a temporary smaller motor that will be sufficient for trial operations. In the end, the plant was ready for commercial operation within a month of receiving start-up power instead of the usual 6 months that is normal for such commissioning activities.

A few other factors must be kept in mind for smoother execution of mega industrial projects. Of foremost importance is sensitivity and responsiveness towards the socio-political surrounding of the Project. You all must be aware that many prestigious projects have failed to take off due to socio-political unrests. It is the responsibility of those in the project management to ensure that local people are supportive towards the project. They should not feel that the project will affect their life or livelihood in an adverse way during the long term. Secondly a sound administrative set-up is required to ensure that no theft and security threats are looming large over the project. And last but not the least is to ensure proper safety measures so that there is zero accident.

The ownership of successful project completion lies with the Project Management team. Credit goes more to those who can make all the stakeholders involved when there is a crisis in the project.

Thus combined efforts and perfect alignment within the Project Management team can only yield a successful project which is the ultimate objective of Project Management.