CHAPTER 7

COMPILATION OF BEST PRACTICES

7.1 BEST PRACTICES

The word "best" is a contextual and a relative term. In an organizational context it may apply to diverse areas, business, systems, culture, technology and its usage, management practices, products and competitive strategy etc. Best for one may not be best for someone else, while ordinary and normal for one may be best for others.

The objective of documenting and sharing best practices is to initiate a thought process of introspection and stir with new ideas for application to enhance business processes. Often there are three clear messages common to all best practices. The first one is that of a process view being taken of any business/ function or department, the work that is being carried out and its alignment to the overall objectives. Second, it suggests that a continuous process for search for better ways is initiated and institutionalized. Thirdly, such sharing send a message of a positive and ongoing relationship of the stakeholders involved in these processes.
7.2 **ANALYSIS RESULTS**

On analyzing the priority options submitted by respondents following five practices in the order of priority in each category have been reported as premier contributor for the excellent performance of NTPC

7.2.1 **HR INITIATIVES**

Training and Development

Performance Management System

Balance Score card

Reward and Recognition system

Employee Satisfaction Survey

7.2.2 **TQM INITIATIVES**

Prouctivity Indices/Perf. Eva. Matrix

Organisational Transformational Study

Malcombrdge Business Excellence Model

Quality Circles

Internalization of MOU
7.3 DETAILS OF BEST PRACTICES

Following are the indepth details of Best Practices being followed by NTPC w.r.t. above mentione prioritised HR and TQM Initiatives

7.3.1 TRAINING AND DEVELOPMENT

Keeping in view the fast advancement of technology in power sector and requirement for the diversification. It is important for every organisation to update skills of the employees before the arrival of need.

We can define performance of Individual according to following formula.

\[ \text{Performance} = \text{Skill} \times \text{Knowledge} \times \text{Motivation} \times \text{opportunities} \]

In order to timely develop skills, knowledge and competence in the employees, proper training policy and plan is required.

As briefed earlier NTPC has got very elaborative Training policy in place. Detailed salient features are given below, this will help other players of power sector to develop skills and competencies of their work force-

a) Since inception, NTPC decided to create a dedicated cadre in the stream of Engineering, Finance, Personnel etc. through recruitment at entry level as trainees and providing pre employment induction
training. An induction training scheme was evolved for each cadre of employee in the Company- Artisan Trainee in the workmen category, Diploma Trainee in the supervisory category and Executive Trainees in the executive category. The selection process comprising a comprehensive written test to gauge the technical knowledge and aptitude, followed by an interview has been followed year after year. The trainees undergo a comprehensive modular training of one year duration comprising classroom, hands on technical training and managerial development to develop themselves into power professionals.

b) To impart the latest technical and managerial skills and knowledge to its employees, training has been a major thrust area. At the apex level, the in-house Power Management Institute specializes in management development and IT training. Training interventions are two-pronged – need-based training for all employees and training required to be imparted to meet organizational goals. An elaborate system of training need identification of each employee is in place. Training activities are carried out at each plant at the training centers, which are equipped with advanced training
infrastructure. Some of the plants training centers have also been equipped with highly sophisticated laboratories for providing specialized training in various areas of power plant technology. NTPC has also invested in setting up simulator training centers for both coal-based and gas-based plants, which are the only one of the kind in the country.

To inculcate a work culture which is value-based, special emphasis is being laid on value and attitudinal training. All shorts-terms and long-term programs that are conducted in-house necessarily have sessions on values, which are cherished by the corporation.

For bringing quality in all facets of work, thrust has been given to train large number of workers in quality systems and approximately 80% of the workers have been trained and are actively involved in quality circles.

To groom future leaders, long terms custom made Advanced Management Programs (APMs) are being organized in association with some of the leading institutes of management development in India. The participants in these are exposed to the latest trends in various management disciplines like HR, Finance, Strategic
Management, IT etc. The Advanced Management Program is a culmination of knowledge being imparted in these areas right from the middle management level. Career linked training programmes at Dy. Manager, Manager and Sr. Manager levels called the Foundation Course in General Management, Capsule Course in general Management and Enhancing Managerial Competency Course respectively.

c) A collaborative program to develop engineers into specialized power engineers, has been launched in 1998 with IIT, Delhi for providing M.Tech. in power generation. Six batches of 25 candidates each have undergone this course and have successfully completed it. The seventh batch is undergoing the course. Apart from the normal classroom lectures the candidates have to prepare a detailed dissertation on a topic related to power plant management in their relevant discipline which is of immense use in the corporation.

d) To enhance the academic qualification of employees, who have diploma qualification, distance learning collaborative programme is on going with the Birla Institute of Technology and Science, Pilani. This is a six semester, three year distance education course leading
to a graduate degree in engineering. Through this program, it is envisaged that the knowledge level as well as the basic qualification of employees would be enhanced.

1. 7 Mondays of training must for each, employee, every year.

2. Minimum investment of 1.6% of Salary Bill for development of skill and competencies of employees.

3. There are level wise certain planned Interventions in both Technical and Non-Technical areas.

4. Simulator of each new technology is procured before the arrival of unit/plant.

5. Training is need based w.r.t each individual Employee, i.e. units are preparing employee wise training calendar.

6. Importance to capability building is given compared to competence building.

7. Evaluation of training system is carried out at all links of Training cycle:
   (a) Context level
   (b) Input level (Programme Development)
   (c) Reaction after the programme
   (d) Learning Index by conducting pre and post tests
   (e) On the job behaviour change
8. As most of power sector utilities are either state or central owned where employee joins with certain skill set and remains their in the organisation for duration upto 30-35 years till his/her retirement, therefore organisations should undertake responsibilities of making tie up with educational institutes of repute to skill and knowledge upgradation of employees, for example various tie ups which NTPC has initiated are:

(a) B.E. (power Engineering) through BITS Pilani
(b) M.Tech through ITI New Delhi
(c) Diploma in Power Engineering
(d) ITI through NCTVT approved ITI
(e) IGNOU centres at all locations
(f) MBA through MDI

9. After providing training opportunity for implementing the learnings with accountability and responsibility should also be fixed.

10. With the Advent of New technology, infrastructure with respect to e-learning has to built by the organisations.

11. Apart from training methods certain non-training methods such as Mentoring, Development centre, Business Minds, outbound experiential learning are also encouraged.

12. Along with the above, for proper sharing and utilising organisation wide learning NTPC has implemented knowledge Management.
Above all Power Sector organisations here to become learning organisation. Peter Senge, who popularised learning organisations in this book, "The fifth Discipline' described learning organisations as places," Where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured where collective aspirations are set free and where people continually learn how to learn together in order to enhance their capacity to create what they want to create.

In the absence of learning, companies and individuals simply repeat old practices, change remains cosmetic and improvements are short lived. Solving problem, introducing a product and reengineering a process all require seeing the world in a new light and acting accordingly. There is a strong link between learning and continuous improvement.

NTPC has adopted HR vision of learning organisation and they have developed various methods also such as :

(a) Professional circles
(b) Knowledge Management
(c) Sharing of training experiences etc.

7.3.2 Performance Management System

It is the individuals performance carried out in Interpreted way which ultimately leads to performance of the organisation.
Power sector which is presently running into crisis is attributable to poor performance Management system both at operational as well as Individual level.

As most of the work in power sector is carried out in shifts and through all the team members of shift group it becomes difficult to point out the low contributors in the organisation.

Further at many places performance management system is not the transparent one and as most of utilities are govt. owned people have in their mind set that no body, can throw them out of the organisation till they achieve the age of retirement.

In the above systems even it becomes difficult to identify the good performers because their contributions also get masked by the non-or low performers.

Therefore it is very-very important to have sound transparent performance Management System.

New performance Management system adopted by NTPC is a model PMS system and it has following features, which are important for managing the performance of Individuals and the organisation.

(a) New PMS of NTPC demands setting of targets at the beginning of the year and these targets are to be set in relation to MOU signed by the NTPC with the government and the various responsibilities and activities which are to be undertaken by the department and unit concerned to the Individual.
(b) Provision of Mid term appraisal and review is also their so that corrective preventive actions can be taken well before the time.

(c) New PMS System also takes care of managerial and development of technical competencies by the individual during the year.

(d) New PMS system also takes care the core values actualisation by the Individual.

(e) At the time of final appraisal, new PMS system also takes care of training and developmental aspects of the Individual w.r.t. shortfall in achieving targets or acquisition of new set of Managerial & Technical competencies.

(f) New PMS system also takes care of potential appraisal of the individual.

(g) Above all New PMS policy stipulates for categorising individuals with respect to their performance and for under performers identification of developmental plan is also envisaged in the system.

However in addition to above, system of compulsory retirement also prevails in the organisation and time to time NTPC is also announcing voluntarily Retirement scheme.
7.3.3 **BALANCED SCORE CARD**

Through HR balanced score card NTPC is evaluating, quantifying and making assessment of each activity and initiative to judge whether the particular activity or initiative is really adding value to the organization or not. Every quarterly data is collected, and ratios are interpreted with respect to previous performance.

NTPC is measuring four perspectives with following objectives

A) **FINANCIAL PERSPECTIVE**
- Summarizes the key financial indicators or readily measurable economic consequences of actions taken.
- Answers questions like -
  - Are we managing the cost of turnover/churn?
  - Are our HR plans and programs competitive?
  - Is our HR service delivery cost-effective?
  - Are we managing financial risk?
  - What is our return on investment in people?

b) **INTERNAL PROCESS PERSPECTIVE**
- Identifies the critical internal processes the organization must excel to
  - deliver value proposition to attract & retain customers
- satisfy shareholder expectations
- Answers questions like -
  - Are our staffing support systems fostering better selection?
  - Are our other HR processes/transactions efficient and effective?

c) **CUSTOMER PERSPECTIVE**
- Identifies customer and market segments and measures performance in these targeted segments.
- Answers questions like -
  - Are we viewed as a great place to work?
  - Are we creating an environment that engages and builds commitment in the workforce?
  - Is HR viewed as an enabler to attracting, retaining, and engaging talent?
  - Is HR viewed as providing effective support systems to employees?

d) **STRATEGIC CAPABILITY PERSPECTIVE**
- Identifies infrastructure that must be built to create long-term growth and improvement.
- Answers questions like -
  - Do we have the talent we need to be successful?
  - Do we have the leadership bench strength we need to be successful?
- Are we helping the co. meet our external customer service needs?
- Is HR facilitating organization integration and shared vision?
- Are we growing our HR capabilities?

7.3.4 REWARD AND RECOGNITION SYSTEM

Earlier i.e. before 2003, each plant of NTPC used to award its meritorious outstanding contributors among employees during the Independence Day, Republic Day celebrations by awarding them certificate and cash awards.

But in 2003, after the receipt of recommendations of SMILE (strategic management Initiatives for Leadership Excellence) committee, NTPC introduced new rewards & recognition system which contains 13 types of rewards/recognitions and almost all levels of employees are included in its sphere.

Out of 13 rewards certain awards are to be given immediately on the completion of appreciable work, certain awards are given on monthly basis and certain awards are given on early basis.

Names of few awards are mentioned below

<table>
<thead>
<tr>
<th>S.NO</th>
<th>AWARD</th>
<th>DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Star of the month</td>
<td>Every month one award in each department</td>
</tr>
<tr>
<td>02</td>
<td>Power Excel award</td>
<td>Six awards in a year at each project</td>
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</tbody>
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### 7.3.5 Employees Satisfaction Surveys

To know the pulse of the employees (main stake holders of the organisation) and to know feedback about the implementation and perception of employees towards various Initiatives made applicable by the organisation and for making assessment and review of implemented policies and strategies, it is important that all organisations should conduct various satisfaction surveys from time to time.

Purpose behind these surveys is to take timely action and provide maximum satisfaction to employees (our Internal customers), which in turn helps in gaining the satisfaction of external customers.

There is a regular system in NTPC, to conduct surveys on various aspects apart from certain detailed survey, certain Dip Stick measurements (small surveys) are also conducted.

NTPC conducted employees satisfaction survey (organisational climate survey) in 2001 and 2004 with the nick names BODH I and II. First
survey was conducted with 22 parameters and the second survey with 27 parameters. Results of the survey are tabulated below.

From the graphs we can see that on account of various corrective actions taken after the I survey, the level of satisfaction with respect to all most all parameters has increased during the II survey.

Apart from above two main surveys, which were conducted through 3rd party i.e. Shri Ram Centre, NTPC itself has conducted in between e-Darpan survey through electronic mode.

NTPC has also conducted detailed survey with respect to particular initiatives also, for e.g.

(a) Survey w.r.t. Mentoring System

(b) Survey w.r.t. B-E (power Engg.) course through BITS plan

(c) Vidya Survey w.r.t. functioning of Schools and Educational faculties in NTPC.

(d) Every year survey is conducted w.r.t. effectiveness of local HR deptt. of the unit.

Further more, NTPC is taking care of analysing and reveiwng the results of survey and modifying their policies. for example :

(a) In mentoring system, supervisors promoted to executive levels were also included.

(b) It is proposed to take entrance test for admission in B.E. (power engineering course).
(c) Coaching faculties for the students of XI and XII classes for seeking entrance in Engineering and Medical Colleges was started after Vidya Survey. Further policy of identifying and awarding best school in the region also started.

(d) Trophies to Best HR deptt. and Best Employee Development Centre started.

7.3.6 PRODUCTIVITY INDICES (PERFORMANCE EVALUATION MATRIX)

In order to increase productivity and obtain peak performance it is important to run the O&M of units at peak level without harming the life of equipments.

It is being observed in the power sector that units of NTPC are always giving high PLF as well as they are available for running more compared to units of SEB's. Further health of the NTPC units is also better. How this is happening.

It is occurring due to systems of reviews and best operation and Maintenance practices followed by NTPC.

Every month each unit of NTPC is reviewed during Monthly ORT (Operation Review Team) meeting.

Quarterly review of units of all project is personally done by Director (operation) along with his team members.
Further NTPC has developed performance evaluation Matrix to measure performance of every plant. There is set of around 30 parameters on which every station is evaluated with respect to OSM of plant, some of these parameters are:

(a) Adherence to planned maintenance schedule and duration.
(b) Quality of overhaul
(c) No of outages
(d) Heat Rate, Auxiliary power consumption and specific oil consumption and specific oil consumption.
(e) Efficiency tests as per schedule
(f) Energy audit as per schedule etc.

And on the basis of cumulative report of this performance evaluation Matrix annually best performing stations are declared.

7.3.7 MALCOMBRIDGE BUSINESS EXCELLENCE MODEL

At most of the NTPC units, business excellence model as depicted by Malcombridge (and popularized in India by CII-Exim collaboration) has been adopted.

This model contains nine criterions out of which five criterions are enablers and 4 criterions are results.
While applying these criterions in true spirit units of NTPC are getting effectiveness in performance with respect to both technical as well as managerial aspects of the organization.

For the first time, the model was implemented by NTPC-Dadri in the year 2003-04 and later on other projects have also stated adopting it.

CII-BUSINESS EXCELLENCE MODEL (EFQM)

7.3.8 ORGANIZATIONAL TRANSFORMATION

PROJECTION DISHA

- NTPC has conducted organizational transformation study through international consult M/s A.T. Kearney
- Following areas have been Covered during the study-
  - Business strategy
• Business Process Re-engineering & IT strategy.
• Restructuring
• Human Resource Strategy
• Implementation Strategy

- HR strategy design-
  - HR strategy for short and long term
  - Infective for enhancing Hygiene factors and raising employee morale.
  - Employee Relations for Effectiveness of HR infective.
  - Instruments for Culture and Values Assessment
  - Competency mapping and Assessment Integration of HR function.

On the basis of this study only NTPC has adopted its total diversification strategy. With this study Ntpc has implemented People Soft HRMS package and now it is going to implement ERP also. NTPC has developed Career development Scheme and it is going to be implemented very soon.

7.3.9 QUALITY CIRCLES

Quality circles can be defined as small group of employees belonging to same area of functioning, sit together at fixed interval of time to brainstorm about the problems faced by them in their Areas. Out of the many problems faced by them, they select one problem for finding and implementing solutions at their own level.
This process of systematic problem solving by utilising various problem solving tools helps to develop following skills and competencies in the work force

(a) Decision making

(b) Creatively and Innovative thinking

Further work force feels pride and sense of belongingness because they themselves have solved the problem and gained the fruits of solution.

Further the skills acquired while participating in Quality Circles activities are also helping them for self development and finding solutions of their personal solutions.

Quality Circle movement also enhances team spirit and sense of achievement among the participants. They learn presentation skills and open up in their communication skills as they are making presentations at various levels (as high as at International levels).

Participants of Quality Circles are utilising following problem solving tools:

(a) Brain Storming

(b) Data collection & Analysis

(c) Flow

(d) Flow Diagrams

(e) Cause and effect diagrams (Fish bone diagram)

(f) Pareto charts and Histograms

(g) Control Charts
In NTPC, voluntarily 60-80% of non executive employees are participating in QC movements from both technical as well as non-technical areas.

Each units conducts two Quality Circles meets every year. Each quality circle has to undertake at least 4 problems for finding solution every year. Each quality circle has to conduct at least two monthly meetings and attendance of 80% of members is expected. Members themselves choose their leaders and D leaders. Management helps them by appointing one coordinator and one facilitator amongst the executive, but role of coordinator and facilitator is only to facilitate the participants, they do not hare to suggest any solutions.

Every year Regional Head Quarter is organising Regional QC meet, in which 6 circles from each project participate.

Similarly every year corporate centre is organising National level QC meet in which first six winners of Regional QC meet are allowed to participate.

Completions of problems solved by QC of each project are published and shared within the organisation so that the benefits can be reaped in all corners of organisation.

Benefits of Quality Circles are numerous, it aims for mutual as well as self development of Individuals.

Although in the initial years, unions tried to hinder the movement, but later on when they understood real philosophy of QC movement they here
stopped putting any resistance rather they have become helping hands in QC movement.

7.3.10 CORPORATE PLANNING – INTERNAL MOU

SYSTEM

MoU stands for Memorandum of Understand and the concept is based on the Principle of Management of Objectives. As a Public enterprise, NTPC enters into a MoU each year with the Government of India. NTPC is one of the first PSUs to enter into a MoU with the Government of India and has been rated excellent for its MoU performance for the last 18 years. MoU covers both financial and non-financial performance. For a growth-oriented organization like NTPC it was felt necessary to have a proper system of managerial accountability to have sustained growth. Also, with the changing economic scenario and competition round the corner, it becomes essential to work on true business lines by creating profit centers coupled with accountability and functional autonomy for all round performance enhancement of the company. It is towards achievement of this goal that the internal MoU concept and its implementation was adopted within NTPC from the financial year 1998-91.
OBJECTIVES & BENEFITS:

The internal MoU concept is introduced with the following objectives:

- To bring in role & functional clarity.
- To improve the quality of relationship between Management and the Managers.
- To define performance in totality and in a realistic manner.
- To adopt methodology for the evaluation of performance bringing in objectivity.
- To pave way for a healthy competition with the overall vies of growth enhancement.

The system has got distinct benefits like;

- Integration of departmental Goals/Objectives with organization goals and Objectives.
- Provides clear-cut direction for the growth of the enterprise.
- Improves work culture and attitude.
- Facilitates identification of the weaknesses and strengths down the line.
• Define the performance in clear terms and brings in enhanced accountability.

• Obtains tie-up/commitment of the inputs/support.

• Priorities multiple goals and objects.

• Brings in the objectivity in departmental/ functional performance evaluation methodology.

• Provides functional autonomy to departments.

• Enhances managerial/ competitive skill.

INTERNALIZATION OF MOU

The coverage of Internal MoU presently is:

3. Regional MoU covering the Plant/ Project and regional activities in respective Regions.

4. Corporate functional MoU covering important functional activities of all Corporate functions.
THE PROCESS

The process follows the Demings Principle of P-D-C-A ie. PLAN-DO-CHECK-ACT. The Planning part includes the draft preparation by Regional Head Quarters and Corporate functional HODs. Towards this, the respective Regions ask the units under their control to prepare the Annual MoU targets for the identified performance parameters.

The unit head in turn asks the Department Heads to finalize the performance parameters. Thus, the entire chain is operative and involved in preparation of respective MoUs and thus drives the accountability and responsibility across the different levels. The draft MoU thus prepared are forwarded for scrutiny by the MoU committee and finalized at the MoU Committee meeting with Region/Corp. functions representatives. The signing of MoU is done at the Management Committee Meeting where CMD and all Functional Directors are present. The internal MoU is finalized and signed only after the external MoU of NTPC with Government of India is signed.

The Do part of the cycle is the actual performance of the units and the corporate functional departments consistent with the set targets.
The Check is through the monitoring at Unit levels during Site Management Committee meetings, and at the Regional Management Committee by Regional EDs. Deviations from the target figures are analyzed and corrective actions are initiated. For all Corporate MoUs, similar reviews are carried out by the concerned HODs.

Actions taken accordingly facilitate each unit, region and respective corporate function achieve their targets. Organizational goals are thus achieved by integration of both corporate and departmental goals through a positive and healthy competition.

**MOU EVALUATION**

At the end of the financial year, the MoU Committee formed at the Corporate level evaluates the performance with respect to the targets for each function and unit. Depending on the nature of activities at different Regions/ corporate functions and their relative priorities, appropriate weightage are allotted to performance parameters in Operation, Finance, Commercial, Project implementation, Rehabilitation & Resettlement, Human Relations, Environmental, Ash utilization, Inventory Management etc. The final overall scores for each Region/ corporate function is categorized as Excellent, Very Good, Good & Poor. The best performance
amongst units and functions is recognized and appreciated at apex level meetings like Executive Committee Meetings & Management Committee Meetings.

MoU concept has enhanced the sense of belongingness and ownership feeling is further strengthened among all the members. Internal MoU is yet another positive step towards a successful organization aimed at continuous improvement of performance and achievement of better economic efficiency through participative target setting and objective performance evaluation.