

## INDUSTRIAL RELATIONS PRACTICES INFLUENCE ON MAINTAINING PRODUCTIVITY IN POWER SECTOR - A CASE OF NTPC

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### ABSTRACT

The art of successfully managing businesses and projects requires the ability to both design and execute an effective IR strategy. This means that risks need to be identified and understood with sufficient time and leeway to enable them to be avoided. The Industrial relations management recognized as an essential element of organization's strategy. Present paper look into the Industrial relations influence on Productivity in NTPC. This research explores the IR practices contribution for maintain Productivity in NTPC. Study was conducted in NTPC unit at Ramagundam in the state of Andhra Pradesh.

**KEYWORDS:** Industrial Relations, Employee Participation, HRM Practices

### INTRODUCTION

Power sector is growing at a significant level in India. Growth of Indian power industry enables the usage of effective HRM and IR practices to gain competitive advantage. After 1991, Power sector reforms allowed competition in power sector. Large private companies have entered into the power generation to compete with the public sector organizations. NTPC is also facing huge competition from the private sector organizations even it is placed as the fifth largest power producer in the World.

This research explores the IR practices contribution for selected outcomes in NTPC. The Study conducted in NTPC Unit at Ramagundam in the State of Andhra Pradesh. In addition to, Study also critically reviewed the power sector scenario in India and Human resource challenges in Indian power sector.

### CONCEPT OF INDUSTRIAL RELATIONS

The term 'Industrial Relations' comprises of two terms: 'Industry' and 'Relations'. "Industry" refers to "any productive activity in which an individual (or a group of individuals) is (are) engaged". By "relations" we mean "the relationships that exist within the industry between the employer and his workmen." The term industrial relations explains the relationship between employees and management which stem directly or indirectly from union-employer relationship.

Industrial relations are the relationships between employees and employers within the organizational settings. The field of industrial relations looks at the relationship between management and workers, particularly groups of workers represented by a union. Industrial relations are basically the interactions between employers, employees and the

government, and the institutions and associations through which such interactions are mediated. The term industrial relations has a broad as well as a narrow outlook.

Originally, industrial relations were broadly defined to include the relationships and interactions between employers and employees. From this perspective, industrial relations cover all aspects of the employment relationship, including human resource management, employee relations, and union-management (or labor) relations. Now its meaning has become more specific and restricted. Accordingly, industrial relations pertains to the study and practice of collective bargaining, trade unionism, and labor-management relations, while human resource management is a separate, largely distinct field that deals with nonunion employment relationships and the personnel practices and policies of employers.

## **PRODUCTIVITY**

Cully et al. (1999) conducted research on HRM practices influence on productivity. Study selected HRM practices such as working in teams; autonomy, pay schemes, employee participation and greater discretion in the place are contributing for high rate of productivity. Husield (1995) noticed that Recruitment & Selection and training impact on productivity. Baker et al. (1996) established from his research that Job rotation, cross-functional teams, integration of functions and quality circles contribute positively for the productivity.

## **REVIEW OF LITERATURE**

Takkar (1962) examined the labor problems in the textile industry in Bombay. In this research, he reviewed the union management and industrial relations of the companies.

Laxminarain (1982) has conducted research on issues in public enterprise management. Study was look into the recruitment, job security, training, industrial relations and personal practices in the public enterprises.

Lal (1985) conducted research on inter personal relations in companies; in this research he looks at the changing scenario of the interpersonal relations in the companies as perceived by the respondents. The research found that Medium earning groups are not satisfied and Satisfactions positively related to attendance and productivity.

Battu Nagaraju (1998) has conducted research on Human Resource practices in KCP Industries, Vuyyuru in state of Andhra Pradesh. He has selected recruitment, selection, employee welfare, wage policy and Industrial relations in the Company. The research concluded as no clear documentation maintained by the KCP industries.

David Peetz (2012) considers the link between productivity, fairness, and industrial relations (IR) policy at workplace, national, and international levels using data from micro- and macro-level empirical studies as well as data from the Australian Bureau of Statistics (ABS), the OECD, and other sources. There is some evidence that policies that enhance fairness enhance economic performance.

## **OBJECTIVES OF THE STUDY**

The following are the Objectives of the study

- To know the profile of the NTPC under study.
- To study which IR practices are influencing the selected outcomes in NTPC.
- To offer suggestions for effective IR management in NTPC

## SCOPE AND LIMITATIONS OF THE STUDY

This study intends to know the contribution of IR practices and their influence on Productivity. The present study is limited to one single unit of NTPC. Other power sector organizations excluded from the study. Senior level and middle level Employees only considered for the study. NTPC Ramagundam unit selected to know the HRM practices and their contribution to the selected outcomes.

- The perception scores are not measures of effectiveness of IR Practices/Policies of NTPC. The Impact of existing IR Practices/Policies as perceived by respondents against results captured.
- The conclusion is purely based on perceptions of executives. No secondary data is taken into consideration.
- Perceptions are not sought (Marked as NA) against results vice versa HR Practices/Policies where 'a priori' reasoning for correlation is not there. However, there is room for argument with respect to other correlations also. This can be further explored.
- Utmost care is taken to reduce errors associated with filling lengthy Questionnaire, monotony, Respondents awareness about all policies of NTPC etc.

## METHODOLOGY

### Universe of the Study

NTPC Ramagundam Unit considered for the data collection. Unit have almost 3500 employees are working in various modes. Executives of NTPC (E3- E8 grade) selected for collecting information In this study executive employees working in 7 units of NTPC are comprise as universe of the study.

### Sample and Data Collection

Simple random sampling method used to collect the data. Questionnaire was designed for considering different elements of HRM practices using by the NTPC (26 HR practices) and 7 outcomes of NTPC. The questionnaire distributed personally to the selected employees in the organization and they are requested to provide required information. Employee development department also reminded the all the department heads to provide the required information. After consistent personal visit to the all departments in NTPC Ramagundam received the responses as follows

Questionnaire was distributed in 7 production units, associated departments and concern NTPC administration offices in the NTPC, Ramagundam. The total employees in the organization 1600(includes Executives and Non Executives). The executive strength is 600 (E1 to E8 Grades) and the present study focuses on E3 to E8 consisting of 370 executives. Out of 370 Executives researcher able to reach 340 executives and 340 questionnaires are distributed in the NTPC. Questionnaire distributed to employees by meeting personally. 270 questionnaires only received from respondents and in that valid questionnaire are 252. Sample collection details are shown in following table.

**Table 1**

Questionnaire Distribution						
Location	No. of Units at Location	Total No. of Executives (E3 to E8)	No. of Questionnaire Given	No. of Questionnaire Received	Final No. of Questionnaire Valid	%
Rama Gundam	7	370	340	270	252	68

## Measures for the Study

The present study conducted to know which practices contributing more for the selected outcomes in NTPC and to know the contribution level of practices in NTPC. IR practices are considered for the study.

## Statistical Techniques Used for Data Analysis

- Reliability test
- Ranking Method
- t-test

## POWER SECTOR

Indian power sector is fifth largest power producer in the world with installed capacity of 207.85 GW as on 2012. India produced 855 Billion units of power during 20011-12 fiscal year. India will add more than 600 GW power generation by 2050. Growth of Installation capacity and generation capacity is the major key factor to the Economic development of the country. Generation of power & Usage of power in all sectors successively increased from first five-year plan to Present. Total installed capacity is increased to **2, 25, 793.10 MW** as on **30 June 2013**. Per capacity electricity consumption increased from 15KW to 814 KW on end of 2011. Generation of electricity increased to 789 billion kWh from 5.1 kWh. India is fourth largest consumer of power, even facing large gap between demand and supply of power. India power sector aiming to provide Reliable power and Quality power at optimal power cost.

## National Thermal Power Corporation

NTPC vision is “To be world’s largest and best power producer, powering India’s growth.” And mission is “Develop and reliable power, related products and services at competitive prices, integrating multiple energy sources with innovative and eco-friendly technologies and contribute to society” (NTPC, 2012)<sup>1</sup> NTPC established in 1975 with aim of planning and organizing as integrated development of thermal power sector in the country. National Thermal Power Corporation started generating one fourth of thermal power for country. NTPC achieved remarkable achievements in the Power generation and associated sectors. UK has recognized NTPC as sixth largest thermal power producer in the world.

## Productivity in NTPC

Every company will pride for their competent and highly motivated employees in the organization. NTPC has the man-mw ratio for 2011-12 is 0.74 and 0.69. Generation per Employee is 9.25 during the year.

**Table 2**

Productivity in NTPC			
S. No	Year	Gen/Employee(Mu)	Man: MW Ratio
1	2003-04	7.11	0.98
2	2004-05	7.43	0.91
3	2005-06	7.81	0.91
4	2006-07	7.99	0.91
5	2007-08	8.48	0.87
6	2008-09	8.75	0.85

Table 2: Contd.,

7	2009-10	9.22	0.82
8	2010-11	9.27	0.77
9	2011-12	9.25	0.74

Source: NTPC Directors report<sup>2</sup>

## ANALYSIS

### IR Practices Influence on Productivity by Using Ranking Method

Table 3

IR Practices (I)	Overall IR Practice (II)	Weight		Weight Average		Rank	
		(I)	(II)	(I)	(II)	(I)	(II)
Post Retirement Plans	Industrial Relations	912	884	3.62	3.50	V	NA
Knowledge Management System		908		3.60		VI	
Job Security		948		3.76		III	
Township Facilities		860		3.41		IX	
Safety facilities		956		3.79		I	
Recreation facilities		888		3.52		VIII	
Grievance handling		952		3.78		II	
Participative Management system		852		3.38		X	
Relationship with Unions and Associations		916		3.63		IV	
Information Technology deployment		908		3.60		VI	
Communication channels		904		3.59		VII	
Relationship with Statutory authorities		906		3.60		VI	

Source: Field survey

\*(I) refers to Individual IR practices \*\* (II) refers to Overall IR practices

Safety practices and Grievance Handling procedures are more contributing for Productivity in NTPC

### Hypothesis 1

$H_0$  = There is no contribution of IR practices for productivity in NTPC ( $\mu < 3$ )

$H_1$  = There is a contribution of IR practices for productivity in NTPC ( $\mu > 3$ )

Table 4: Descriptive Statistics of the Status of IR Practices Influence on Productivity in NTPC

Variables	N	Mean	Std. Deviation	Std. Error Mean
IR practices contribution for productivity in NTPC	252	3.50	.71441	.04500

Table 5: One Sample t-Test for IR Practices Influence on Productivity with Test Value 3

Variables	Test Value( $\mu$ ) = 3					Test Value ( $\mu$ ) = 4			
	t	df	Sig. (2-Tailed)	Mean Difference	Result	t	df	Sig. (2-Tailed)	Mean Difference
IR practices contribution for productivity	13.491	251	.000	.60714	Reject $H_0$	-8.729	251	.000	-.39286

The One sample t-test was run with the help of SPSS. The mean of the IR practices of the NTPC compared with the Test Value 3. Test found the difference between mean of the practices contribution to Productivity in NTPC and Test value 3 statically significant (IR  $t=13.491$ ,  $p<0.05$ ). Null Hypothesis rejected; the result concluded as practices are contributing for the Productivity in the NTPC. To know the level of IR practices contribution on maintaining Productivity in NTPC, one sample t- test is run with the SPSS with test value 4. Test determined the difference of mean of the practices contribution for Productivity in NTPC and test value 4 was statistically significant (IR  $t=-8.729$ ,  $p<0.05$ ). The HRM practices contribution is lies between 3 and 4 (more than 3 but less than 4). The test found that there is a moderate contribution of IR practices for Productivity in NTPC.

## IR PRACTICES AND PRODUCTIVITY NTPC

- Safety facilities are highly contributing for maintains Productivity in NTPC. Research found that Safety facilities are more helpful for Productivity in NTPC. Presently in the organization ranked 1<sup>st</sup> towards Productivity in NTPC. Presently it is acting as reward for the organization but chances are more if organization not concentrates of issues and problems of Productivity. E3 to E5 and E6 to E8 Grade of respondents are moderately satisfies with the Safety facilities in the organization By considering the age of the respondent 20 to 40 years of respondents are feel Safety facilities are highly contributing for the maintain Productivity in the organization. 41 and above years of Employees are moderately satisfies with the practice towards Productivity in the NTPC. whereas 20 to 40 years respondents agreed more with the statement. If we consider the years of service 6 to 10 and 11 to 20 years in service respondents feel highly contribution of Safety facilities with Productivity in NTPC. 0 to 5 and 21 and above years of service respondents feel that safety facilities are moderately contributing for is Productivity in NTPC.
- Grievance handling ranked as 2<sup>nd</sup> in contribution for maintain Productivity in NTPC. E3 to E5 and E6 to E8 grade employees are feel that Grievance handling are moderately contributing for maintain Productivity in NTPC. 20 to 40 and 41 and above year's employees are also feel Grievance handling is moderately contributing for the Productivity in NTPC. 0 to 5, 6 to 10 and 11 to 20 and 21 and above years of service respondents feel that grievance handling is moderately contributing for maintain Productivity in NTPC.
- Respondents feel that industrial relations are moderately contributing for Productivity in NTPC. E3 to E5, E6 to E8 grade, 20 to 40 and 41 and above years of age respondents, 0 to 5, 6 to 10, 11 to 20, 21 and above years in service respondent's opinion is IR practices contributing moderately for the maintaining Productivity in NTPC.

## CONCLUSIONS

Generation of power is very crucial for any country to meet requirements of the country. NTPC is largest power generating organization in India and having global footprints. NTPC generating power to meet the requirements of the nation and it is achieving milestones in the power production. It is possible only with committed human resources acquired by the organization and adopting the best IR practices by NTPC to be sustain as a Maharatna in all aspects in our country. Study is conducted to know which IR practices are contributing more for selected outcomes in NTPC. Study found that safety, and Grievance practices are more contributing for the Productivity in NTPC. All the IR practices contributing for the Productivity in NTPC

## SUGGESTIONS FOR THE FUTURE RESEARCH

The present study limited to the single location of the NTPC. All the IR practices in NTPC throughout INDIA are same. Therefore, there is scope for research on location-based differences of IR practices influence on outcomes in NTPC. Present study covered Executives in the NTPC and There is scope for include Non-executives in the future. There is scope for conducting comparative study between NTPC and private sector, NTPC and public sector organizations and NTPC and other Maharatna companies.

## REFERENCES

1. Banker, Rajiv D., Seok-Young Lee, Gordon Potter, and Dhinu Srinivasan, (1996), “*Contextual Analysis of Performance Impacts of Outcome Based Incentive Compensation*”, Academy of Management Journal, Vol. 39, pp. 920-949.
2. Cully, M. Woodland, S. O’Reilly, A. and Dix, G. (1999), *Britain at Work: As depicted by the 1998 Workplace Employee Relations Survey*, Routledge, London.
3. Huselid Mark A. (1995), “*The Impact of human Resource management practices on turnover, productivity and corporate financial performance*”, Academy of Management Journal, Vol.38, No.3, pp 635-672.
4. Laxmi Narayan (1982), *Principles and Practice of Public Enterprise Management*, S. Chaw and Co, New Delhi.
5. Lal Das, D.K (1985), *Change in Interpersonal Relations of Industrial employees- An analysis*, Indian journal of Industrial Relations Vol.20, No.3, January.
6. Nagaraju Battu (1998), *Human resource management in the KCP sugar and Industries corporation Ltd., Vuyyuru : A case study*, Andhra University, Vishaka patnam
7. Thakkar G.V. (1962), *Labour problems of Text tile industry, A case study of the labour problems of the cotton mill industry in Bombay*, Bombay: Vora & company.

