

## APTURJA POWER LIMITED: HUMAN RESOURCES ANALYTICS

*Shweta Jaiswal Thakur and Rishabh Sharma wrote this case solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.*

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It was April 2020, and Kailash Kaushik, business head at Apturja Power Limited (APL), was worried. “Why are these fresh college entrants leaving us?” Kaushik asked Keshav Chaubey, human resources head at APL. “I don’t understand at all,” Kaushik continued. “Voluntary attrition among them is rising every year.”

Nearly half of the 2,000 employees hired by APL in the past two years had left within a year of joining. Of the 1,000 new hires each year, APL had reported 545 resignations in fiscal year (FY) 2019, as compared with 455 in FY 2018. Chaubey explained to Kaushik that hiring suitable candidates and acquainting them with the organization required enormous effort and capital, especially in the regulated power sector. Both senior officials at APL realized that it was high time they prevented these rising first-year attrition levels.

Chaubey believed that candidates hired for a particular function were expected to stay in that role for a minimum of two to three years. He was of the view that students from elite engineering and management institutions often had unrealistic expectations, since most of them had no prior work experience. Chaubey had been with APL for nearly 21 years and had witnessed the shifting demands of new recruits, who appeared to increasingly prioritize work–life balance and reduced monotony over earning a stable income, which contrasted with the priorities of employees from the earlier generation. However, Chaubey had never before observed such high rates of attrition among new hires at APL.

Chaubey recalled what an employee in the Production Department had said about his decision to resign: “Sir, I really liked what was offered to me, but I wanted to define my career, my way. I had my own ideas, but I have been put under burdensome targets here. I can’t just do the mundane work of managing labour and operating machines.” However, the employee’s ambivalent statement did not reflect his performance at APL over the last 12 months. His direct manager had rated him as an extraordinary performer who connected well with technicians and labourers, handled shifts independently, and achieved all production targets. Chaubey contemplated whether the employee’s statement was an anomalous opinion or whether it was representative of the developing expectations of new employees.

Did this employee’s statement indicate a potential problem in the human resources (HR) practices that APL maintained? Chaubey wanted to identify reliable indicators so that he could tackle the situation and prescribe an appropriate action plan to reduce new-hire turnover and thereby strengthen APL’s human capital. He wanted to justify his experience and presence at APL by delivering a suitable HR strategy.

At this moment, Chaubey recollected his rendezvous with Rishabh Sharma, a recent master of business administration graduate, who had been with the plant for about a year. Since Sharma brought a fresh perspective and related well with his contemporary new employees. Chaubey invited him to analyse reliable indicators so that he could tackle the situation and prescribe an appropriate action plan to reduce new-hire turnover and thereby strengthen APL's human capital.

### **COMPANY DESCRIPTION: APL**

APL was the power distribution business subsidiary of the Indian conglomerate APTURJA Group. It operated under a unified board and management, with its head office in New Delhi. With an aggregate capacity of 8,880 megawatts (MW), the company had a turnover of US\$2.27 billion<sup>1</sup> in FY 2019 (see Exhibit 2).

As of 2020, APL had five functional power plants. Although these were distributed across the country, they followed standard operating procedures. The company operated six 250 MW supercritical boilers and five 330 MW subcritical boilers at Korba, Chhattisgarh; six 330 MW units at Mundra, Gujarat; six 250 MW units at Raigarh, Chhattisgarh; five 250 MW units at Singrauli, Madhya Pradesh; and five 200 MW units at Kawai, Rajasthan (see Exhibit 2).

India's electricity sector was highly regulated; it was monitored by the Central Electricity Regulatory Commission (CERC) to ensure that no profiteering occurred. Power purchase agreements (PPAs) made up the majority of electricity sales in the market.<sup>2</sup> India had a single national grid, by which power could be transferred from one region to another according to demand and generation. APL had long-term PPAs with the state governments of Gujarat, Chhattisgarh, Rajasthan, Madhya Pradesh, and Odisha, covering about 8,500 MW.

Generation tariffs played a pivotal role in scouting for potential buyers to sign PPAs. The various costs to be recovered through tariffs included capacity costs (and related capital costs); interest on equity, debt, and working capital; depreciation; operational and maintenance expenses; and energy charges consisting of fuel charges. Return on equity was fixed at 15.5 per cent by CERC regulations, creating competition among generators to cut their respective generation costs and hence reduce their tariffs.

### **ORGANIZATIONAL VALUES**

APL's corporate goal was to create lasting value for its stakeholders—including its power consumers, employees, and shareholders, through processes that focused on consistent generation and delivery of regular power to national customers, including power distribution companies and open access consumers.<sup>3</sup> APL's strength rested in its unwavering focus on optimal production, its seamless training resources, and the continuous support that employees received from senior management.

APL had maintained an integrated approach since its inception. The organization focused on optimizing operations, with reliable power generation at the core of APL's performance. Its Production Department attracted the maximum number of bonuses and recognition across all the departments, further incentivizing employees to achieve production targets.

<sup>1</sup> All currency amounts are in US dollars unless otherwise indicated.

<sup>2</sup> Discussion Paper on Market Based Economic Dispatch of Electricity: Re-designing of Day-ahead Market (DAM) in India, No RA-14026(11)/3/2018-CERC, Prepared by Staff of Central Electricity Regulatory Commission, December, 2018 [http://www.cercind.gov.in/2018/draft\\_reg/DP31.pdf](http://www.cercind.gov.in/2018/draft_reg/DP31.pdf), Introduction (1.2), Page 5.

<sup>3</sup> Open access customers procured power directly from power generation units, whereas traditional consumers availed their power from commercial power distribution companies, which acted as aggregators in the supply chain.

The organization had evolved rapidly since its inception in 1968. As per CERC regulations, power dispatch in the transmission grid was scheduled according to the energy charges quoted by the generator, creating cost competitiveness among the power producers.<sup>4</sup> APL developed an agile culture to address this competitiveness in the power sector. In order for APL to compete, management strove to keep the organization increasingly cost-effective, agile, and efficient. With rising agility, APL provided a competitive milieu for professionals to hone their skills in power engineering, operations, and project management. This setting was particularly suited to professionals who found this target-driven culture, competitiveness, and team performance encouraging.

## HR STRATEGY

### Staffing

Every year, APL hired new graduates through several channels. Over the past few years, 1,000 new employees had been recruited annually, which aligned with the company's strategic aim of expanding operations and capacity. The recruits were distributed equally across APL's five units. The HR head believed that although campus recruitments yielded high-quality hires, four additional specialized hiring methods were also required: (1) remote recruitment from campuses that APL did not visit; (2) recruitment from employee and union wards; (3) internal promotions from non-executive grades; and (4) recruitment through LinkedIn. As such, APL had five channels for recruitment, with each channel accounting for 20 per cent of employee recruitments.

APL defined a list of strategically important campuses around the nation. These campuses were identified on the basis of reputation and level of engagement with the organization. Campuses maintained engagement by framing research on practical problems in APL's power plants, sending students for technical excursions, and inviting APL's presence in their conferences and guest lectures. On average, APL recruited at 18 campuses each year, with each campus visit costing the company approximately \$1,000.

After filling 20 per cent of available posts through campus recruitment, the next 20 per cent of vacancies were filled using online job portals. In particular, graduates from campuses that APL did not visit were targeted. This mode of recruitment was cheaper for APL, costing roughly \$100 for each recruitment year and \$20 per candidate in administrative costs.

The next 20 per cent of posts were filled by candidates who had been referred by existing employees, based on some proof of merit or blood relation. This mode, known as the APL Ward Program, which was offered to employees who had completed at least 10 years of employment with APL, cost APL \$20 per hire.

Agency hiring took care of candidates with referrals from labour unions. APL had committed to recruit 20 per cent of postings from labour wards to non-executive roles. This mode cost APL less than \$150 per year.

The remaining 20 per cent of candidates were hired through LinkedIn based on their profiles and their interest in the organization. These were highly selective roles, mapping key skills to relevant positions. This mode carried scouting costs of about \$200 over each recruitment cycle, as well as \$20 per candidate in administrative costs.

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<sup>4</sup> Extension of Pilot on Security Constrained Economic Dispatch (SCED) of InterState Generating Stations (ISGS) Pan India, CENTRAL ELECTRICITY REGULATORY COMMISSION, NEW DELHI, Petition No. 08/SM/2019 (Suo-Motu), September 2019, <http://cercind.gov.in/2019/orders/08-SM-2019.pdf>, 2(b), Page 2.

## Compensation

APL maintained a rate of compensation significantly higher than that of its major competitors in the power sector. As such, it was one of the most sought-after employers on the campuses from which it recruited. Compensation rates were predefined according to the positions offered. For example, assistant managers at the lowest executive level (a role offered to engineering graduates) were offered an annual package of \$10,500.

Such compensation attracted the best talent to compete for jobs at APL. In turn, APL enjoyed huge brand value among young people competing for employment across the full range of its hiring channels.

## Training

From the moment new employees began the onboarding process, APL heavily invested in raising the potential of the organization's workforce. APL organized a unique orientation program that provided the new employee with a signing bonus, accommodation for a week at a five-star hotel, personalized onboarding, travel reimbursement, custom trips to nearby tourist destinations, and engagement sessions with key personnel. APL spent about \$1,400 in associated costs on each new employee. The company provided each new employee with training relevant to the department that the employee had joined and to the employee's responsibility and performance.

Apart from an initial six months of training, which involved acquainting the employee with the power production systems and orienting them to best practices followed at APL, the company also offered selective role-specific training on a variety of topics, which included, but were not limited to, management information systems modules, Six Sigma, quality improvement, customer relationship management, and lean production. Training efficiency was closely monitored, based on evaluation of the employee following each training session.

## Work Organization

APL divided its workforce into 14 departments (see Exhibit 3). Each department had defined strategies and goals for each quarter. Although each department functioned independently, all work functions were closely related, deriving value for the organization in a coherent way.

Power production lay at the heart of operations at APL. The company focused on optimizing production through cost-cutting initiatives and the adoption of lean technologies. All other departments sought to maximize their contribution toward achieving this long-term goal.

APL continued to monitor staff performance throughout the duration of staff employment. Most managers found employees' performance to be satisfactory; however, in some cases managers struggled to ensure employees were sufficiently productive. To promote optimal growth among its employees, APL proposed a promotion or a raise in salary, or both, for every individual, based on the individual's contribution to the department, dedication, and performance in the fiscal year under consideration.

APL assigned notice periods to employees according to the role that the employee was hired for. APL highlighted its zero-day notice period for trainee management and middle management roles to emphasize its commitment to keeping employees, and to ensure that those who wished to pursue other opportunities, could do so at will. APL was known as an employer that valued ambitious staff who had the urge to give their best; in return, APL expected the best treatment. However, APL required a longer notice period for certain roles and positions, including personnel in essential services, such as core power generation, and key positions in top management, where it remained very important to maintain staffing numbers. To strengthen its human capital, APL had maintained an average of 200 new hires each fiscal year across each plant location for the past few years.

The organization had developed a township in the vicinity of each power plant and therein offered a broad range of amenities, such as residential quarters, supermarkets, and recreation centres, which in turn employed and were inhabited by the local community. APL was accustomed to organizing engaging extramural activities among its employees, labour unions, skilled technicians, and township dwellers.<sup>5</sup> These activities included occasional cricket matches, safety drills, departmental trips, the celebration of all national festivals, and the organization of skits and role-plays throughout the year.

## THE PROBLEM

Chaubey had no clue as to what was going wrong with the new hires. There had been no significant change to hiring practices over the past decades, especially with regard to recent graduates. In the past five years, Chaubey had checked with staff multiple times about their accommodations and food provisions, and these were reported as being optimal. Chaubey was also driven to ascertain the effectiveness of his recruitment activity. Rather than rely on his own instincts, Chaubey decided to take a data-driven approach to address the challenge of high levels of turnover within the first year of employment. He wanted to identify indicators that would aid in forming a strategy that could address the current crisis.

Chaubey invited Sharma to identify indicators based on data (see Student Spreadsheet, product no. 7B21C001) and additional information provided (see Exhibit 4) in order to prescribe a suitable strategy to address the issue. This task was the first direct assignment that Chaubey had offered Sharma since the latter had joined the company. Sharma wanted to make the most out of this opportunity to have his talent recognized. He had attended a course on HR analytics during his management studies and was excited to analyze the numbers and frame a prescriptive strategy. By doing so, he would create value both for himself within the organization as well as for the organization itself.

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<sup>5</sup> Township dwellers, which were individuals who either resided in or worked in the township developed by APL in the vicinity of its power plant, included families of both APL employees and other small business owners operating in the township.

**EXHIBIT 1: APTURJA POWER LIMITED'S PROFIT AND LOSS ACCOUNTS, 2015–2019 (IN US\$ MILLION)**

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
<b>INCOME</b>					
Revenue from Operations	1,210.13	1,361.68	2,043.07	2,268.97	2,274.24
Other Operating Revenues	0.00	0.00	48.23	54.28	35.87
<b>Total Operating Revenues</b>	1,210.13	1,361.68	2,091.30	2,323.24	2,310.11
Other Income	342.54	417.77	153.92	334.09	387.59
<b>Total Revenue</b>	1,552.67	1,779.45	2,245.22	2,657.33	2,697.70
<b>EXPENSES</b>					
Purchase of Stock-in-Trade	283.24	88.58	113.47	186.50	306.58
Cost of Fuel	388.17	444.86	561.31	664.33	674.43
Changes in Inventories of FG, WIP, and Stock-in-Trade	0.00	28.14	0.00	0.00	0.00
Employee Benefit Expenses	17.07	19.01	45.34	62.70	59.34
Finance Costs	430.09	535.62	843.23	797.20	750.11
Depreciation and Amortization Expenses	136.31	152.02	293.07	368.29	366.11
Other Expenses	37.61	35.37	350.26	394.78	345.71
<b>Total Expenses</b>	1,292.49	1,303.60	2,206.67	2,473.80	2,502.29
<b>Profit/Loss before Exceptional, Extraordinary Items, and Tax</b>	260.18	475.85	38.55	183.53	195.41

Note: FY = fiscal year; FG = finished goods WIP = work in process  
Source: Created by the authors.

**EXHIBIT 2: APTURJA POWER LIMITED'S FUNCTIONAL POWER PLANTS ACROSS INDIA**

Location	No. of Units	Unit Capacity (MW)	Total Capacity (MW)	Distance from Nearest Urban Area (in km)	Distance from Nearest Airport (in km)
Korba	6	250	1,500	200	275
	5	330	1,650		
Mundra	6	330	1,980	45	60
Raigarh	6	250	1,500	110	135
Singrauli	5	250	1,250	50	75
Kawai	5	200	1,000	300	375

Note: MW = megawatts; km = kilometres.  
Source: Created by the authors.

**EXHIBIT 3: DEPARTMENTS AT APTURJA POWER LIMITED**

<b>Administration</b>
<b>Finance</b>
<b>Human Resources</b>
<b>Information Technology</b>
<b>Legal</b>
<b>Production</b>
<b>Projects and Engineering</b>

<b>Quality Assurance</b>
<b>Research and Development</b>
<b>Safety</b>
<b>Sales and Promotion</b>
<b>Supply Chain Management</b>
<b>Strategy</b>
<b>Warehouse</b>

Source: Created by the authors.

**EXHIBIT 4: ADDITIONAL INFORMATION ABOUT NEW HIRES IN THE FIRST YEAR OF EMPLOYMENT**

- **Performance rate:** A performance rating was given by the immediate manager based on mapping the employee's key result areas. The performance rate depicted the number of employees with a performance rating above 70 per cent in a particular FY. In FY 2018, of 1,000 employees in their first year of employment, 764 had a performance rating above 70 per cent. In FY 2019, this number grew to 778.
- **Training efficiency rate:** Training efficiency was based on evaluation of the employee after each training session. This evaluation was mostly written; however, in crucial trainings, such as boiler operations, the trainer evaluated the employee based on performance with the equipment for 30 days. The training efficiency rate depicted the number of employees with training efficiency above 70 per cent in a particular fiscal year. In FY 2018, out of 1,000 employees, 808 had a training efficiency rating above 70 per cent. In FY 2019, this number grew to 812.
- **Retention rate:** The retention rate indicated the number of employees who were retained after their first year of joining the company. In FY 2018, out of 1,000 employees, 455 resigned within the first year. In FY 2019, this number grew to 545.

Note: FY = fiscal year.

Source: Created by the authors.