Unlocking Wealth in the Spares

Opening Para

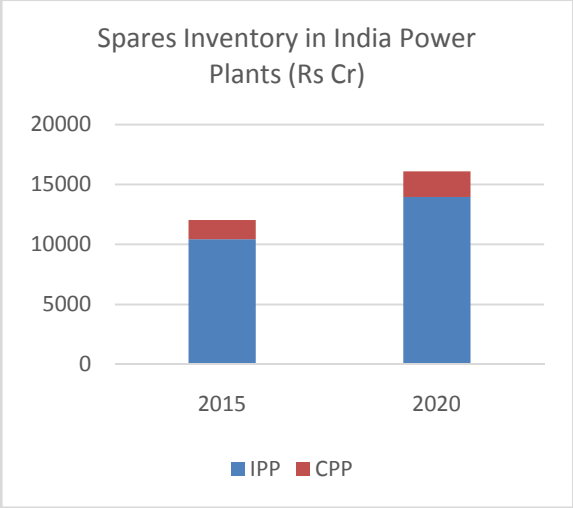
Inventory burden across various power plants is increasing due to perceived adverse impact of stock-outs, excess ordering and lack of option to order inventory in resource efficient manner. It is estimated that huge capital ~Rs12,000 Cr is trapped in the form of spares across different power plants in India and the same, as per conservative estimates, is likely to go up to ~Rs 16,000 Cr by 2020. Significant amount of money is spent towards inventory carrying costs. Time has come to unlock this wealth. Industry is looking for various options. An online facility to sell and buy spares could be a resource efficient and transparent option for the industry. Says Shardul Kulkarni, CEO – OnMSpares.com

Introduction

Indian power sector is in state of flux. Sector is going through challenging times with sluggish power demand due to moderate pace of industrial activities, overcapacity in certain pockets of India, halted reforms in land acquisition, coal availability, drought like situation putting pressure on water availability and mandatory energy efficiency targets. Such external issues are forcing companies to seriously look into manageable factors within plant boundaries viz efficient O&M. Among others, spares is grabbing the management's attention as significant capital is locked in the form of spares and also, it's a single largest component in annual O&M budgets. Before deliberating challenges faced in inventory management, lets first understand how big is the problem

How big is the inventory at Power Plants?

It is conservatively estimated that power generating plants hold ~Rs 12,000 Cr spares inventory with Independent Power Producers (IPP): Captive Power producers (CPP) share of 85:15. Further, the value of inventory being held at power plant goes on increasing with the age of plant and obsolescence.



Due to this, the inventory burden is expected to grow by 6% to ~Rs 16,000 Cr by 2020 with the similar IPP:CPP share.

Issues in Inventory Management

Our extensive primary interactions with industry stakeholders have identified six issues in inventory management across various power plants:

Intermittent demand – Power plant spares consumption characterised with intermittent demand, putting O&M team in dilemma. Keeping reliability issues in mind and in absence of credible option during emergency, power plant O&M team prefer over stocking of spares than to listen the music from top management for reliability.

Lack of data on failure to do trend analysis further aggravates the issue further resulting in blind spots and hence added inefficiencies.

Loss of revenue – Revenue loss in case of 8 hrs of shutdown for 600 MW unit is quite significant ~Rs 1.5 Cr .Stakes are quite high with stock-outs, which put pressure O&M

teams to stock more than what is actually desired.

Unregulated environment – In cost plus regulated environment, power plants had the liberty to stock more and pass on the cost of extra stocking and its carrying cost to the end consumers. However, gone are the days of pass through and new generation power plants are now operating with minimum inventory. This has increased the risk of revenue loss.

On the other side, under unregulated environment , profitability could take a hit under over-stocking situation resulting in enhanced Working Capital (WC) requirements. So, it's a double whammy for O&M teams.

Excess order–Constraints on budget, long lead delivery time, remote locations, uncertainty regard the size of the job and corporate culture often result in excess ordering most of the times. Result is pile of inventory goes up every year and almost doubles every five years.

Vendor Issues– Excess spares typically can't be returned to OEM. An online mechanism to check its use somewhereelse is not present at the moment. This adds up to the challenges of O&M teams.

Energy Efficiency Targets – With more than 60% power being generated through coal, power generation sector is the most polluting industry. It is featuring in the Perform, Achieve & Trade scheme of Bureau of Energy Efficiency (BEE). To achieve mandatory energy efficiency targets under the scheme, upfront capex is required. This adds to challenges to financial management which is already strained due to stretched payment cycle from dilapidated discoms.

Probable Solution

A three pronged process could be followed to streamline the inventory:

Excess Fat Identification – Historical spares consumption would be analysed. Inventory master could be scrutinised to identify deduplication, if any. Through historical trend analysis, spares could be further segregated in critical, obsolete and slow moving. List of such excess and obsolete spares could be finalised in consultation with O&M team.

Trimming of Excess Fat – Excess spares, so identified, could be certified from the management. Post that, different disposition strategies viz vendor buy-back, corporate redeployment, third party liquidation through an online facility could be accessed.

Smart Sourcing – Now that excess fat has been trimmed, it is important that fat is not accumulated again. For that, just in time smart sourcing is required. Different sourcing such as on-site depo, online ordering could be explored to maintain a lean inventory.

Benefits

OnMspares.com could bring in following four benefits:

Unlocking Wealth – O&M department is a cost centre. However, by trimming excess and obsolete inventory, O&M department could unlock wealth hidden in the inventory with utmost transparent manner. Management is bound to please with this approach.

Reduced Working Capital – By trimming excess inventory, total inventory as well as its carrying costs would go down. This implies reduction in working capital requirements for the corporate, which is a welcome feature in high interest rate regime.

Availability of Cash for Regulatory Compliance – Thanks to tighter environmental norms, Power plants are subjected to multiple regulations such as effluent monitoring, stack monitoring, mandatory energy efficiency targets. Extra cash generated through spare monetisation could come handy to fund the capex for installation of advance technology to comply with the environmental regulations.

Resource Efficient Option – Traditional spares order and purchase involve significant waste of resources viz time and money with very feeble chances for on-time delivery of spares. An online facility could very much remove inefficiencies in ordering, result in optimum and transparent price discovery and ensure on time delivery of spares.

Conclusion

With multiple uncontrollable factors, Power Genco's Management is concentrating upon controllable factors viz O&M, more so spares inventory. OnMspares.com could be a new option available to the industry to smartly manage the inventory and challenges associated with it such as intermittent demand, adverse consequences of stock-outs, unregulated environment restricting pass through of inventory holding and carrying costs and get rid of the mindset of excess order. OnMspares.com aims to bring industry stakeholders to a common platform to streamline the inventories at the power projects, traders, Original Equipment Manufacturers (OEMs). This could bring multiple benefits such as unlocking wealth trapped in spares, reduced working capital , proactive option for regulatory compliance and reduced resources while enhancing efficiencies to manage spares. In the long run, the benefits won't stop at Generating Companies and with tariff optimisation, would get passed on to electricity consumers at large.

About The Author

Shardul Kulkarni is CEO of OnMSpares.com, an online facility dedicated to trade power and process industry spares. Shardul is power industry professional with ~15 years of experience. In the past, he has worked with reputed organisations like SBICAP, Crisil Infra Advisory, Singapore based DSM company and Tata Strategic Management Group covering cross section of process industry such as power, cement, metals and chemicals. He has authored several thought leadership articles in O&M and has been invited at many conferences to give a market view on the same.