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Power Shot¹⁶

National Infrastructure Pipeline proposes major outlay for the sector



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"We are developing a supportive skilling ecosystem"

Interview with Power Sector Skill Council's Vinod Behari

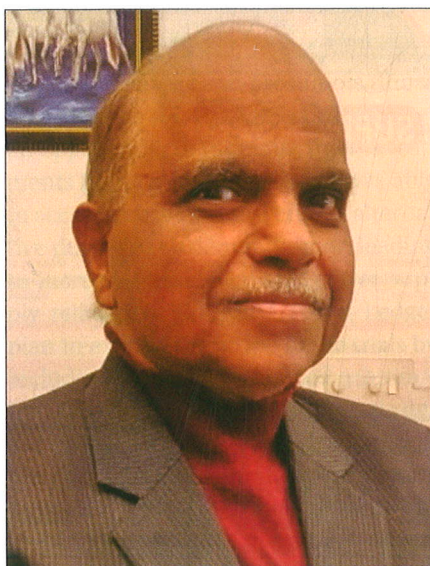
The non-availability of skilled and employable manpower has been a significant challenge for the power sector, especially in the power distribution segment. The Power Sector Skill Council (PSSC) has been playing a key role in bridging this gap between supply and demand. In the past four years, it has helped expand the skilled workforce through various initiatives. In an interview with *Power Line*, Vinod Behari, chief executive officer, PSSC, spoke about the current status of skill development in the sector, PSSC's role in it, the initiatives taken and future workforce requirements...

Could you explain the genesis and mandate of the PSSC?

PSSC has been set up primarily with the objective of making a skill-trained and certified workforce available for key roles in the power sector. Being promoted by the Ministry of Power, the Ministry of New and Renewable Energy, and the Indian Electrical & Electronics Manufacturers' Association, PSSC has representations from across the sector with all major stakeholders on board. It has been an industry- and employer-driven initiative designed to improve the availability of readily employable and skilled workforce through a robust process of standardisation (occupational standards), skill development, assessment and certification.

In order to deliver on its mandate, PSSC has taken a range of initiatives. It has developed the Qualification Packs/National Occupational Standards (QP/NOS) for major job roles in the power sector that have a high employment potential. These QP/NOS extensively map the job deliverables and performance criterion for the job holder, align them with appropriate skill sets, competencies and specific knowledge inputs, and standardise them across utilities to give them a national character.

PSSC has so far developed QP/NOS with reference to 35 major job roles across power generation, transmission, distribution, downstream operations and equipment manufacturing, etc. These standards capture almost 80 per cent of



entry-level job roles. In addition, PSSC has developed standardised learning resources aligned with applicable QP/NOS. These include textbooks, audio-visual content along with the trainer's guide, assessment and certification tools and protocols, etc. It rolls out its skill development initiatives in partnership with training providers that are accredited after detailed due diligence. Training delivery is followed by third-party assessment of trainees (a mandatory requirement) and certification by PSSC of participants achieving a threshold level of qualification. While on the one hand this ensures standardisation and delivery of skilling processes, on the other it facilitates the industry's acceptance and improves the availability of a readily employable workforce.

What is the workforce composition in the power sector? What are the challenges being faced?

Currently, the organised workforce in the power sector, covering generation, transmission and distribution, stands at nearly 1.6 million, which is replenished at the rate of around 20 per cent per annum to make good separations on account of mid-career changes, retirement, etc. At senior managerial levels, market forces take care of demand and supply because the numbers are limited. The real challenge lies at the bottom of the pyramid where volumes are high, skilling standards and quality remain uncertain and there is general reluctance of employers to invest in skilling, which eventually impacts the quality of the workforce and increases their exposure to hazards and unsafe operations. Also, the employment landscape in the power sector has been getting fairly complex with the infusion of large-scale contract and outsourced workers. This makes it very difficult to assess precisely the exact shortfall of a skilled workforce and thus ensure their adequate skilling preparedness.

What are the subsectoral skill gaps and requirements?

Based on the initial skill gap survey conducted by PSSC, the expected incremental requirements for the 10-year period ending 2027 will be around 1.6 million. This covers activities such as operations and maintenance, EPC and project construction requirements and downstream operations such as street lighting and domestic solutions. This, however, does not include the requirements in the renewable energy (which is likely to be of

a huge order considering the 175 GW target by 2022) and power equipment manufacturing segments.

A major discovery of the skill gap survey remains that the real volume of demand growth lies in downstream operations, which are largely part of the unorganised sector. As regards the areas in the power sector that require the largest skilled trained manpower in the organised section, power distribution is on the top. That said, the requirement of a skilled workforce for downstream operations in the last leg of the electricity delivery system such as street lighting, and consumer demand for a range of domestic solutions, etc. have been growing rapidly. This can be attributed to flagship schemes such as The DDUGJY, IPDS and Saubhagya. The estimated incremental requirement of a skilled workforce in downstream operations for the period up to 2027 stands at over 800,000. Therefore, sustained efforts are needed to ensure the availability of a skilled workforce.

What have been the major initiatives taken by PSSC?

Preparation completed by PSSC thus far includes the readiness of a robust 1,800 plus certified trainers across multiple job roles and more than 800 certified assessors, as well as the development of learning resources for over 30 job roles in 12 languages. During the past four years of operation, PSSC has achieved skill training and certification of around 126,000 workers across all subsectors, though largely in distribution areas. In the initial years of operation, PSSC confronted several challenges and limitations. Having overcome them to a large extent, PSSC looks forward to delivering bigger numbers in the days to come.

As regards the long-term approach, it will deal with the issue of skilled workforce availability on a comprehensive basis. PSSC is in the process of conducting nationwide demand aggregation for the purpose. Another long-term activity PSSC proposes to pursue is the facilitation

of net export of a skilled workforce to countries abroad, taking advantage of its demographic dividend and young population profile. To this end, PSSC plans to align its QP/NOS to global standards. It plans to begin with SAARC countries in its immediate neighbourhood, where skilling needs and standards are expected to be comparable with Indian standards.

What have been PSSC's major achievements and what are the upcoming initiatives?

In the past, PSSC has addressed some of the major skilling challenges, thereby supporting the government's mega socio-economic reform initiative. One of the challenges in the implementation of the Saubhagya scheme in 2017 was related to the uncertain availability of a skill trained and certified workforce at the ground level across remote and rural areas. PSSC, supported by the Government of India, launched the Saubhagya skilling initiative targeting the states of Assam, Bihar, Jharkhand, Madhya Pradesh, Odisha and Uttar Pradesh. PSSC developed a customised qualification pack and used another existing one (on technical helper – power distribution). It took extensive measures and trained a workforce of around 30,000 people under the Pradhan Mantri Kaushal Vikas Yojana, to complete the task of providing electricity access to households.

PSSC's upcoming initiatives include the Railway Electrification Skilling Initiative, targeting skill training and workforce certification for the ambitious railway electrification project. This initiative aims to train and certify nearly 140,000 individuals, both fresh (almost 50 per cent) and mid-career upskilling intervention.

The Bihar ITI Skill Development Project (a tripartite collaboration among the Bihar State Power Holding Company, the Bihar State Labour Resources Department and PSSC) is another major upcoming project. It relates to a demand-driven implementation of training and certification programmes in the power sector at 10 selected ITIs in the state of

Bihar. Demand aggregation carried out by PSSC for this purpose reveals a substantial requirement of trained and certified workforce across multiple job roles, largely in the power distribution area. This is likely to be a path-breaking and model initiative.

What are the emerging challenges and the way forward?

In the coming years, electricity distribution and downstream operations, covering energy efficiency projects such as street lighting and a wide range of domestic solutions, are likely to be the key areas of demand from the skilling volume perspective. Further, the MSME and unorganised sectors would obviously be a priority for PSSC. However, the lack of formal skilling standards and the absence of a supportive ecosystem have been serious limiting factors. Skilled workers in our country do not get social recognition. Thus, skilling has low aspirational value for the youth.

Financing skilling initiatives remains the biggest challenge. Some of the other challenges are the reducing number of permanent workers on account of the adoption of flexible outsourced manning solutions; employers' general reluctance to invest in skilling, multi-layering of employment contracts, making the real employer somewhat invisible; inability of candidates to afford the skilling cost; and limited CSR funds for skill development.

PSSC has been addressing these challenges, building robust partnerships with various stakeholders including industry bodies, trader associations, and organised players such as power utilities and equipment manufacturers. All in all, it has been working towards developing a supportive ecosystem with multiple stakeholders on board. This will hopefully enable it to address the skill development challenges. Difficulties notwithstanding, the future indeed looks brighter and PSSC is committed to making the most of it the larger national and social interest. ■