Article

Practice and Research on the "Reaching New Heights" Action for Enhancing Young Employees' Comprehensive Quality in the Construction of a New-Type Power System

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Abstract: With the in-depth advancement of the dual-carbon strategy and the accelerated construction of a new-type power system, the green, digital and intelligent transformation of the power industry continues to deepen, and industry formats, technical systems and job requirements are being iteratively upgraded, setting new standards for the comprehensive quality and professional competence of young employees. Young employees are the core reserve force for the development of power enterprises, and their comprehensive quality bears directly on the safe and stable operation of the power grid, the quality of energy supply and the long-term development of enterprises. At present, the young workforce in the power industry is troubled by a weak theoretical foundation, a single skill structure, and insufficient safety risk control, innovation transformation and physical and mental adaptability, while the traditional talent cultivation model is rigid, its mechanisms are fragmented, its evaluation is one-dimensional and its resource allocation is uneven, which restricts the growth and development of young employees. In response, power enterprises have innovatively carried out the "Reaching New Heights" action to improve young employees' comprehensive quality, integrating modern talent management concepts, building a five-in-one cultivation system covering moral cultivation, safety, skills, innovation and physical and mental health, and creating a refined, digital, closed-loop and collaborative model of talent cultivation. Based on the requirements of new-type power system construction and combined with the characteristics of power positions and the growth patterns of young people, this paper defines the core connotation of young employees' comprehensive quality, analyzes the shortcomings of that quality and the pain points of traditional cultivation, systematically explains the innovative system and practical paths of the "Reaching New Heights" action, reviews its implementation results and existing problems, and proposes long-term optimization countermeasures. This study constructs a young talent cultivation system suited to the new-type power system, fills gaps in industry talent cultivation, and forms a replicable and promotable model for improving young employees' quality and building the workforce, thereby providing solid talent support for the growth of young people and the high-quality development of the power industry.

Keywords: New-type power system; Power industry; Young employees; Comprehensive quality; Reaching New Heights action; Management innovation; Talent cultivation

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1. Introduction

At present, China's energy structure transformation has entered a critical stage, and the construction of a new-type power system-characterized by new energy as the main body, the integration of source, grid, load and storage, and multi-energy complementarity-is being comprehensively accelerated. New technologies such as big data, artificial intelligence, intelligent inspection, virtual power plants, energy storage regulation digital operation and maintenance are widely applied, reshaping power operation modes and job performance standards and imposing compound, innovative

and professional competence requirements on practitioners. The power industry bears on national economic and social development and on energy security, and it urgently needs high-quality compound talents to guarantee the safe and stable operation of the power grid, reliable energy supply and high-quality power services.

Young employees are the core reserve force of power enterprises and have become the main force in frontline operation and maintenance, technological innovation and supply-guarantee services [1,2]. They have a solid educational background, strong adaptability to digitalization and a marked willingness to innovate, but they generally lack frontline experience and suffer from insufficient practical ability, a weak interdisciplinary foundation, inadequate safety awareness and relatively poor stress resistance.

Traditional cultivation of young talent suffers from rigid models, fragmented planning, homogenized methods and one-dimensional evaluation and incentives; it relies mainly on indoctrination-style short-term training and lacks a precise, systematic and long-term education system, making it difficult to meet the requirements of new-type power system construction and the stepped growth of young employees [3]. To this end, power enterprises have innovatively implemented the "Reaching New Heights" action to improve young employees' comprehensive quality, introducing modern talent management concepts, breaking through the original barriers to talent cultivation, building a comprehensive, closed-loop and refined cultivation system, promoting the continuous improvement of young employees' comprehensive quality and consolidating the foundation of young talent for the transformation and development of the industry.

2. Current Status of Young Employees' Quality in the Power Industry and Pain Points in Cultivation Management

2.1. Overall Characteristics of the Young Power Workforce in the New Era

At present, young employees of power enterprises are mainly post-95s and post-00s college graduates. They generally have a high level of education and a solid professional theoretical foundation, have systematically mastered core theories such as power system analysis, principles of electrical equipment and power automation, and possess a good reserve of professional knowledge. At the same time, young people of the new era have grown up in the digital age; they are proficient in various information-based and digital tools, are highly receptive to and capable of applying new working tools such as intelligent inspection equipment, big data operation and maintenance platforms and simulation training systems, and thus have a natural advantage in the digital and intelligent transformation of the power industry. In addition, young employees think openly, dare to break through the shackles of traditional thinking, have a strong desire to innovate and are highly motivated to explore new technologies, methods and models, which can inject fresh vitality into the reform of traditional power operation and maintenance, service and management models [4].

At the same time, however, young power employees in the new era generally adapt slowly to the workplace transition. Their long-term campus learning environment has left them lacking experience in arduous grassroots positions and insufficiently aware of the high-risk, rigorous and complex nature of frontline power positions. Most young employees have a single job experience, remaining fixed in one specialty and one team for a long time and lacking cross-position and cross-specialty experience, so their comprehensive business vision and overall thinking are limited. Moreover, some young employees have weak stress resistance and adjustment ability; when facing high-intensity and sudden work such as emergency repair, holiday power supply guarantee, night shifts and field operations, they are prone to negative emotions and job burnout, and their professional identity, determination to take root at the frontline and tenacity in starting businesses still need to be further improved [5,6].

2.2. Prominent Problems in Young Employees' Comprehensive Quality

First, the foundation of ideological and political quality is not solid, and professional responsibility needs to be strengthened. Some young employees lack the awareness to actively carry out political and theoretical study, do not deeply understand the Party's innovative theories, the red heritage of the power industry and the mission and responsibility of state-owned enterprises, and fail to fully recognize the core value of the power industry in guaranteeing energy security and serving people's livelihood. There is a utilitarian tendency in their work, with emphasis on personal development and remuneration demands and insufficient attention to grassroots experience and dedication; when facing arduous positions and urgent, difficult, dangerous and heavy tasks, they are prone to fear of difficulty and buck-passing. At the same time, some personnel lack safety-related ideological awareness, fail to deeply understand the importance of safe production, harbor a mentality of taking chances, and occasionally commit habitual violations and non-standard operating procedures, bringing hidden dangers to the safe operation of the power grid [7].

Second, the professional structure is relatively single and compound job performance capacity is insufficient. With the advancement of new-type power system construction, new businesses such as new energy grid connection, energy storage regulation, microgrid operation and maintenance and power market trading continue to expand, and the industry's demand for cross-disciplinary compound talents has risen significantly. At present, most young employees have obvious professional barriers, master only the basic skills of their own positions and lack reserves of knowledge on emerging businesses and cross-disciplinary fields; they also commonly emphasize theory over practice, are weak in on-site fault diagnosis, emergency handling, equipment commissioning and scheme preparation, and lack experience in handling complex working conditions, making it difficult for them to meet the operational and development requirements of the new-type power system [4].

Third, there are shortcomings in safety quality and weak risk control capacity. The power industry is a high-risk industry, and safe production is an insurmountable bottom line and red line, imposing strict requirements on operating standards, risk prediction and emergency response. Some young employees have worked for a short time and lack on-site experience; they do not have a solid grasp of power safety regulations, are insufficiently able to identify high-risk operation scenarios such as work at height, live-line work and maintenance with outage, and have shortcomings in hazard identification, risk prediction and emergency response. Non-standard behaviors such as simplifying operating procedures and failing to implement safety measures still exist, and the awareness of the safety red line has not yet been firmly established [8].

Fourth, the efficiency of achievement transformation is low and the motivation for independent growth is insufficient. Although young employees have a certain willingness to innovate, their innovative ideas and methods are limited, making it difficult for them to carry out precise technical breakthroughs based on job pain points; they make insufficient use of innovation carriers such as QC projects, "five-small" innovations, patent applications and technical paper writing, and their innovation achievements are few in number, low in quality and insufficiently applied, making it difficult to effectively improve quality and efficiency. At the same time, some young people are content with the status quo and respond passively, lack the concept of lifelong learning, are insufficiently motivated to actively learn and keep up with new technologies and new businesses, and their capability iteration lags behind the pace of industry transformation [9].

Fifth, physical and mental quality is insufficiently adapted and comprehensive job performance still needs improvement. Frontline power work is characterized by all-weather, high-intensity and sudden tasks, and emergency tasks such as flood control and disaster relief, fault repair and major power supply guarantee have become routine, placing high demands on endurance, stress resistance and rapid response. Some young employees lack experience in arduous positions and have insufficient psychological capacity to withstand pressure, and are prone to anxiety and burnout when facing high-intensity work and urgent tasks; at the same time, their comprehensive abilities in

communication and coordination, teamwork, official document processing and customer service still have shortcomings, and their overall comprehensive job performance quality needs to be comprehensively improved [5].

2.3. Core Shortcomings of Traditional Youth Cultivation Management

In addition to the shortcomings in young people's own quality, the rigid, lagging and single-model traditional talent cultivation management system is a key bottleneck restricting the all-round growth of young people. There are mainly the following five shortcomings.

First, the cultivation system is fragmented and top-level overall planning is insufficient. Traditional youth cultivation lacks a systematic and forward-looking top-level design; training is mostly organized in a scattered and phased manner by various departments, with fragmented content and convergent forms, mainly theoretical lectures, online learning and conference presentations, emphasizing theoretical indoctrination and lacking practical experience and comprehensive quality cultivation. Stratified and classified cultivation has not been implemented according to young employees' length of service, job characteristics and capability shortcomings, so pertinence and effectiveness are insufficient and the overall education work lacks an overall layout [10].

Second, the mentorship model is rigid and the closed-loop education mechanism is missing. Traditional mentorship management is relatively extensive and lacks a standardized mentoring system, standardized processes and quantitative assessment mechanisms. Some mentors have insufficient awareness of mentoring responsibility and use single methods, focusing only on basic skill teaching and neglecting guidance on young people's career planning, psychological counseling and comprehensive quality cultivation; the mentoring process relies on experience and lacks control, the effect of passing on experience varies, and closed-loop management has not been formed [6].

Third, the assessment and evaluation dimension is single and the long-term incentive mechanism is insufficient. Traditional assessment is dominated by performance indicators and attendance, with narrow evaluation dimensions and imperfect quantitative standards; it lacks all-round comprehensive evaluation of ideological and political quality, safety performance, innovation ability and physical and mental quality, and there is a problem of emphasizing performance over quality and results over process. Incentive methods are relatively homogeneous, and differentiated and long-term incentive means are insufficient, making it difficult to fully stimulate the endogenous motivation of young people for independent growth and all-round improvement.

Fourth, the allocation of cultivation resources is uneven and empowerment of grassroots talent is weak. Enterprises do not allocate cultivation resources in a coordinated manner; high-quality teachers, practical training facilities and scientific and technological innovation platforms are concentrated in urban headquarters and core teams, while county-level units, grassroots power supply stations and remote teams have insufficient resource supply and weak guarantees for grassroots youth cultivation, resulting in significant gaps in the quality and progress of young people's growth across regions and unbalanced development of the talent team.

Fifth, multi-party collaborative education is insufficient and the integration of business and education is weak. In the past, youth cultivation was mainly advanced separately by human resources and Communist Youth League departments, while business departments such as production, safety supervision, marketing and frontline teams participated insufficiently; education, business and management were disconnected, a multi-department collaborative education pattern has not yet been established, cultivation content is insufficiently matched with frontline job practice and the strategic development needs of enterprises, and the overall effectiveness of collaborative education is limited.

3. Overall Approach and System Architecture of the "Reaching New Heights" Action for Improving Young Employees' Comprehensive Quality

3.1. Overall Approach

The "Reaching New Heights" action takes contemporary Chinese socialist thought as its guide, closely follows the requirements of youth work in the new era and the high-quality development strategy of the power industry, and is based on the talent needs of new-type power system construction and on enterprises' needs for talent management innovation. [1,2]. With "fostering virtue through education, empowering talent growth, improving management quality and serving development" as its core purpose, with the five major qualities of ideology, safety, skills, innovation and physical and mental health as the core starting points, and with management innovation as the core support, it breaks the traditional extensive education management model and innovatively builds a six-in-one modern cultivation management system featuring "Party-building leadership, precise cultivation, practical tempering, digital empowerment, closed-loop control and diversified incentives". Adhering to the four-dimensional combination of problem orientation, goal orientation, result orientation and management orientation, and targeting the shortcomings of young people's quality and the pain points of traditional cultivation management, it implements stratified and classified precise measures, full-cycle closed-loop management and multi-department collaborative empowerment, creating an all-round, systematic, refined and long-term youth quality cultivation project, promoting the stepped improvement of young employees' comprehensive quality and the iterative upgrading of talent cultivation management efficiency, and achieving resonance among young people's personal growth, enterprise talent development and management quality and efficiency improvement.

3.2. System Architecture

The "Reaching New Heights" action innovatively builds a three-dimensional cultivation management system of "one core, five dimensions, six paths, five management innovations and one closed-loop mechanism". With cultivating compound young power talents for the new era and innovating the youth talent cultivation management model as the core, it focuses on the five quality dimensions of ideology, safety, skills, innovation and physical and mental health; through six implementation paths-Party building to forge the soul, practical training, mentorship empowerment, scientific and technological innovation for quality improvement, humanistic immersion and evaluation empowerment-it implements five management innovation measures: precise management of stratified cultivation, digital management of cultivation carriers, integrated management of collaborative education, quantitative management of assessment and evaluation, and long-term management of incentives and guarantees, forming a full-process PDCA closed-loop management model of "cultivation–practice–evaluation–optimization–iteration". This comprehensively solves the problems of young people's growth, fills the shortcomings of talent cultivation management, and systematically improves young employees' comprehensive quality and the enterprise's education management level.

4. Specific Practice Paths and Management Innovation Measures of the "Reaching New Heights" Action

4.1. Ideological Heights: Party Building to Forge the Soul Plus Ideological and Political Management Innovation, Consolidating the Foundation of Young People's Beliefs

Adhering to the principle that Party building leads League building and that Party building educates young people, the enterprise innovates the ideological and political education management model, making ideological and political cultivation standardized, routine and systematic, and solving the problems of formalism and fragmentation in traditional ideological and political cultivation. First, it innovates the theoretical study management mechanism, establishing a ledger-based management and routine supervision system for young people's theoretical study; relying on carriers such as youth theoretical study groups, youth lecture halls and themed League days, it strictly implements the "first topic" study system, systematically carries out study of the Party's

innovative theories, industry policies, the spirit of model workers and red power culture, and routinely conducts anti-corruption warning education and industry mission education, ensuring that ideological and political study is effectively implemented through institutionalized management. Second, it innovates the practical experience management model, establishing a points management system for young people's practical experience and forming youth commando teams and volunteer service teams; it routinely organizes young people to participate in urgent, difficult, dangerous and heavy tasks and public welfare service activities such as major power supply guarantee, flood control and disaster relief, power supply guarantee for rural revitalization and convenient services, incorporates practical performance into the assessment of young people's quality, and tempers young people's sense of responsibility and strengthens their professional identity through practical experience. Third, it innovates the role model guidance management mechanism, establishing a mechanism for stratified cultivation and routine selection of young role models; it regularly selects young job experts, young pacesetters and outstanding young people, routinely carries out presentations on advanced deeds and face-to-face exchanges with model workers, and builds a closed-loop role model management of "selection–cultivation–publicity–empowerment", creating a strong atmosphere of emulation and catching up [7].

4.2. Safety Heights: Consolidating the Bottom Line Plus Safety Management Innovation, Building an All-Domain Risk Control System

Closely focusing on the core needs of power safety production, the enterprise innovates the management model for cultivating young people's safety quality and promotes the transformation of safety cultivation from "passive learning" to "active risk control". First, it innovates the safety practical training management system, building a trinity practical training model of "online simulation + offline practice + case review", introducing a VR virtual accident simulation system, carrying out safety regulation assessment, anti-violation drills and emergency response training in a standardized manner, and establishing a safety training ledger for young people, so that safety training is fully covered, traceable and assessable. Second, it innovates the on-site safety supervision management mechanism, implementing a standardized management system for young safety supervisors, clarifying their job responsibilities, work processes and assessment standards, and having them participate throughout on-site safety briefings, hazard identification, violation rectification and operation supervision, so that young people can consolidate safety responsibilities and thoroughly understand safety regulations in job practice. Third, it innovates the closed-loop management of safety growth, establishing exclusive electronic safety growth files for young people that quantitatively record all-dimensional data such as safety regulation assessment, safety drills, hazard identification, violation records and emergency response, implementing a "one-vote veto" and dynamic early warning management for safety quality, and directly linking safety performance with awards and promotions and with job competition, thereby compelling young people to develop standardized and safe working habits [8].

4.3. Skill Heights: Practical Empowerment Plus Cultivation Management Innovation, Building a Compound Talent Echelon

In response to problems such as single skills, weak practical ability and homogeneous cultivation among young people, the enterprise innovates a refined, standardized and practice-oriented skill cultivation management model. First, it reforms the mentorship management mechanism, implementing a "dual-mentor standardized mentoring" system with unified mentoring processes, cultivation standards and assessment rules, and equipping young people with a technical mentor and a growth mentor responsible respectively for practical skill cultivation and professional quality guidance; according to young people's positions, length of service and capability shortcomings, it customizes a "one person, one strategy" three-year growth map and establishes a closed-loop management model of monthly mentoring supervision, quarterly review and annual assessment, thoroughly solving the problems of arbitrary, standard-less and assessment-

less traditional mentoring. Second, it innovates the integrated management model of practical training resources, integrating municipal and county practical training resources, implementing an integrated management mechanism of teacher sharing, joint practical training construction and mutual rotation, building modular real-scene training scenarios, and implementing skill-level clearance assessment, so as to consolidate young people's practical ability through standardized training management. Third, it innovates the management mechanism of promoting training through competition, establishing routine skill competitions, job training and technical arena contests covering young people in all specialties and positions, incorporating competition results into young people's skill evaluation and talent selection standards, and using competitions to temper backbones and select talents. Fourth, it optimizes career development channel management, improving the dynamic management mechanism of three-track promotion in management, technology and skills, establishing a dynamic reserve pool of young backbones, giving priority to selecting outstanding young people as team backbones and project leaders, and accelerating young people's growth through precise job empowerment [4].

4.4. Innovation Heights: Scientific and Technological Empowerment Plus Innovation Management Innovation, Activating Young People's Transformation Momentum

Based on the transformation needs of the new-type power system, the enterprise innovates the management system for cultivating young people's scientific and technological innovation, solving the management problems of weak innovation ability, low achievement transformation rate and disordered innovation cultivation. First, it builds a standardized scientific and technological innovation management platform; relying on youth innovation studios, it establishes a dynamic update management mechanism for the scientific and technological innovation project database and implements a scientific and technological innovation management model of "project claiming + open competition for key tasks + special tackling", focusing on core pain points such as power grid operation and maintenance, digital transformation and new energy consumption, and guiding young people to carry out precise innovation breakthroughs. Second, it innovates the management of cutting-edge technology cultivation, establishing a dynamic follow-up mechanism for industry technology iteration, updating in real time the curriculum system for cutting-edge topics such as energy storage technology, virtual power plants and power market trading, building an online simulation learning platform, and implementing routine learning and standardized assessment of cutting-edge technologies to fill young people's shortcomings in cutting-edge technologies. Third, it improves the closed-loop management of innovation incentives, establishing a points quantification system for young people's innovation achievements; it assigns graded points and dynamically accumulates points for innovation achievements such as QC results, patents, papers and technical transformation projects, directly linking points with material rewards, honorary commendations, professional title promotion and job competition, and at the same time builds a follow-up management mechanism for the transformation and application of innovation achievements, promoting the application of scientific and technological innovation results to empower production [9].

4.5. Physical and Mental Heights: Humanistic Immersion Plus Care Management Innovation, Consolidating the Foundation of Young People's Growth

In light of the high-intensity characteristics of frontline power work, the enterprise innovates the management model of humanistic care and physical and mental quality cultivation for young people, building an all-round, routine and long-term guarantee system for young people's growth. First, it innovates refined mental health management, establishing mechanisms of routine mental health assessment, dynamic early warning and one-on-one counseling, carrying out special psychological assistance for young people in high-intensity positions such as night duty, emergency repair and major power supply guarantee, and establishing dynamic management of young people's psychological files to precisely resolve their occupational pressure and negative emotions.

Second, it innovates comprehensive quality cultivation management, routinely carrying out comprehensive courses on communication and service, official document writing, public opinion handling and teamwork, and systematically tempering young people's stress resistance, collaboration ability and comprehensive job performance ability through activities such as quality development, team tackling and outdoor training. Third, it establishes a routine survey and management mechanism for young people's demands, regularly investigating their work, life and career development demands, establishing problem ledgers, rectification ledgers and closure ledgers, and implementing closed-loop management of "demand collection–analysis–rectification–feedback", precisely solving practical difficulties such as marriage and dating, daily life and career confusion, so that young people can settle at the frontline with peace of mind and focus on growth.

4.6. Closed-Loop Control: Innovating the Comprehensive Evaluation Management System to Achieve Full-Cycle Precise Empowerment

Focusing on the management shortcomings of extensive, one-dimensional and non-closed-loop traditional assessment and evaluation, the enterprise innovatively builds a quantifiable, trackable, iterable and fully covered evaluation management system for young employees' comprehensive quality. First, it innovates multi-dimensional quantitative evaluation standards; around the five dimensions of reaching new heights, it refines more than 20 quantitative assessment indicators covering all-round contents such as ideological and political performance, safety performance, skill level, innovation achievements, physical and mental state, job performance and daily performance, solving the problems of vague and subjective traditional evaluation. Second, it innovates a diversified evaluation management model, combining daily points, quarterly assessment, annual evaluation and 360-degree mutual evaluation; it establishes a digital growth file for each young person, accurately drawing a quality portrait and locating capability shortcomings, and dynamically iterating cultivation plans, thus achieving the goal of "promoting learning, reform and improvement through evaluation". Third, it innovates the multi-department collaborative management mechanism, establishing a joint management mechanism linking Party building, human resources, the Communist Youth League, safety supervision, production and teams, consolidating education management responsibilities at all levels, and implementing PDCA closed-loop management of monthly advancement, quarterly review and annual summary, continuously optimizing the implementation plan of the "Reaching New Heights" action and ensuring that cultivation work is effectively implemented and iteratively upgraded [6].

5. Long-Term Management Innovation Mechanisms for Optimizing the "Reaching New Heights" Action for Young Employees' Comprehensive Quality

5.1. Building a Stratified and Classified Precise Cultivation Management Mechanism to Achieve Differentiated Precise Empowerment

Based on the growth patterns of young people throughout their entire career cycle, the enterprise innovates a gradient, differentiated and standardized stratified cultivation management system, thoroughly solving the problem of homogeneous cultivation. For new employees with one to two years of service, it focuses on workplace transition and basic quality improvement, standardly carrying out ideological and political education, safety regulations, basic skills and corporate culture cultivation, with exclusive mentoring plans and assessment standards, to consolidate the foundation of young people's employment. For young backbones with three to five years of service, it focuses on improving compound and innovation abilities, routinely carrying out cross-specialty rotation, digital technology, scientific and technological innovation tackling and comprehensive management ability cultivation, to build compound backbone talents. For young reserve talents with more than five years of service, it focuses on improving leadership and tackling abilities, mainly carrying out project tackling, project research and development, industry exchanges and management experience, to cultivate young technical experts and management reserve forces. At the same time, it strengthens the

coordinated management of municipal and county resources, implements an integrated management mechanism of teacher sharing, joint practical training construction and paired assistance, increases the tilt of resources toward the grassroots, narrows regional cultivation gaps, and achieves full coverage of youth cultivation with no shortcomings [10].

5.2. Building a Digital Smart Education Management Platform to Upgrade Cultivation Management Means

Relying on big data and information technology, the enterprise innovates a digital, intelligent and refined youth cultivation management model and builds an integrated smart education platform that brings together full-process functions such as online learning, virtual practical training, assessment and evaluation, growth files, data analysis, shortcoming early warning and plan push, achieving full-cycle digital control of youth cultivation. It establishes a dynamic iteration management mechanism for cutting-edge courses, updating in real time special courses on new-type power systems, energy storage operation and maintenance and power marketization, and simultaneously upgrading VR virtual training scenarios to achieve immersive simulation training for high-risk operations and complex working conditions. Through big data, it intelligently analyzes young people's learning, assessment and performance data, precisely identifies capability shortcomings, and intelligently pushes personalized cultivation tasks, achieving "one person, one strategy and precise empowerment" and comprehensively improving the intelligence and refinement of youth cultivation management.

5.3. Improving the Diversified Incentive and Career Development Management Mechanism to Activate Endogenous Growth Motivation

The enterprise innovates the incentive management system for young talents, optimizes the differentiated and long-term incentive mechanism, increases policy support for young people at the grassroots frontline and in arduous positions, and improves differentiated standards for skill allowances, innovation rewards, awards and job promotion. It establishes a dynamic management mechanism for the young talent pool and the reserve cadre pool, taking the quality improvement results of the "Reaching New Heights" action, innovation achievements and job performance as the core basis for talent selection, promotion training and priority in awards. It opens up three parallel promotion channels in management, technology and skills, builds a diversified career development system, and ensures that frontline young people have a platform, prospects and motivation. At the same time, it consolidates the main responsibilities of departments and teams for education, incorporates the effectiveness of youth cultivation into the annual performance assessment of departments and the core indicators of team awards, compelling managers at all levels to fulfill their education responsibilities and forming an education management pattern of joint management.

5.4. Deepening the Long-Term Management Mechanism of Party Building Leadership and Cultural Immersion to Consolidate the Foundation of Education

The enterprise continues to deepen the routine management mechanism of Party building leading League building, incorporates youth quality cultivation and talent team building into the assessment system of key Party building work, promotes the establishment of League branches in teams and the sinking of youth strength to the frontline, and achieves deep integration of youth cultivation with safe production, power grid construction and high-quality service. It innovates the management model of youth culture construction, creating an exclusive youth culture brand of "youth reaching new heights and achieving success through practical work", routinely carrying out model worker presentations, skill exchanges and cultural and sports activities, and creating a corporate culture atmosphere that advocates practical work, the courage to innovate and lifelong learning. It improves the long-term management mechanism for young people's mental health, living assistance and demand response, routinely carrying out psychological counseling, assistance with difficulties and demand surveys,

comprehensively solving young people's worries about growth, and achieving sustainable improvement of young people's physical and mental quality.

5.5. Building a Collaborative Education Management Mechanism Integrating Industry and Education to Adapt to Industry Transformation and Development

The enterprise innovates the collaborative education management model of industry, university and research, breaks the internal cultivation barriers of the enterprise, deepens in-depth cooperation with power universities, research institutes and leading equipment enterprises, and establishes a routine collaborative education mechanism. It builds platforms for external study, technical exchange and joint tackling, regularly organizing young people to participate in industry frontier seminars, new technology training and joint project research, and following up in a timely manner on industry technology iteration and policy update trends. It establishes a management mechanism for transforming external resources, transforming the cutting-edge technologies, high-quality courses and practical training resources of universities and research institutes into internal cultivation content, dynamically iterating the cultivation system, filling the shortcomings of cutting-edge technology cultivation, and ensuring that youth cultivation work precisely meets the talent needs of new-type power system construction, so that youth talent cultivation keeps pace with industry transformation.

6. Conclusion and Outlook

In the new era context of accelerated energy transformation, power industry reform, upgraded talent demand and management model innovation, the "Reaching New Heights" action for improving young employees' comprehensive quality is not only a core measure for power enterprises to consolidate the talent foundation, activate development vitality and guarantee energy security, but also an inevitable choice for power enterprises to innovate the youth talent cultivation management model, solve the shortcomings of traditional education and implement the requirements of youth work in the new era. From the perspective of new-type power system construction, this paper systematically sorts out the five-dimensional quality shortcomings of young power employees and the pain points of traditional cultivation management, innovatively integrates modern talent management thinking, and builds a systematic cultivation system of "five quality heights, six practice paths, five management innovations and full-cycle closed-loop control". This thoroughly solves the management problems of fragmentation, homogenization, extensiveness and lack of closed-loop control in traditional youth cultivation, effectively improves the comprehensive quality of the young power workforce and the efficiency of enterprise talent cultivation management, and provides solid practical support for the construction of the young talent echelon in the power industry [1,2].

Improving young people's quality and innovating talent cultivation management is a long-term, iterative and continuously advancing systematic project, not something that can be achieved overnight. In the future, power enterprises need to continue to deepen the construction of the "Reaching New Heights" action, base themselves on the development trend of the new-type power system, continuously iterate cultivation content, optimize cultivation models and innovate management mechanisms, refine stratified and precise cultivation, strengthen digital and smart empowerment, improve long-term incentive guarantees and deepen industry-education collaborative education, and continuously promote the stepped rise of young employees' comprehensive quality and the improvement of talent cultivation management quality and efficiency. At the same time, they should continue to guide the broad masses of young power workers to take root at the frontline, stay true to their original aspirations, be brave in taking responsibility and dare to innovate, actively devote themselves to the main battlefield of energy transformation, power grid construction and energy supply guarantee, and contribute youthful strength to the high-quality development of the power industry and the implementation of the national energy security strategy with excellent comprehensive quality and an uplifting youthful attitude.

References

1. Central Committee of the Communist Party of China and the State Council, "Medium- and Long-Term Youth Development Plan (2016–2025)," [Z], 2017.
2. State Grid Corporation of China, "Guiding Opinions on Strengthening the Training of Young Talents in the New Era," [Z], 2023.
3. China Electricity Council, *China Power Industry Talent Development Report (2024)*, Beijing: China Electric Power Press, 2024.
4. L. Zhang, "Research on the cultivation model of compound young talents in power grids against the background of new-type power systems," *Electric Power Vocational and Technical Education*, no. 2, pp. 78–81, 2024.
5. J. Li, "Paths and practical exploration for improving the comprehensive quality of young employees in state-owned enterprises," *Enterprise Reform and Management*, suppl. 1, pp. 156–157, 2023.
6. H. Wang, "Construction of a full-cycle closed-loop training system for young employees in state-owned enterprises," *Talent Resource Development*, no. 5, pp. 72–75, 2025.
7. F. Liu, "Research on cultivation paths for young employees' ideological and political quality in energy central enterprises," *Enterprise Party Building*, no. 8, pp. 42–44, 2024.
8. Y. Chen, "Analysis of the cultivation and practice mechanism of young employees' safety quality in power enterprises," *Power Safety Technology*, no. 9, pp. 23–26, 2023.
9. Y. Zhao, "Research on cultivating young power employees' innovation ability under digital transformation," *Electrical Technology*, no. 10, pp. 189–190, 2024.
10. M. Chen, "Refined management and cultivation mechanism innovation for young talents in state-owned enterprises," *Modern Enterprise Management*, no. 3, pp. 67–70, 2024.

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