

ESG & Power Equipment & New Energy & Utilities

电力体制改革持续深化，新型电力系统加速构建

The Reform of the Power System Continues to Deepen, and the Construction of a New Power System is Accelerated

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热点速评 Flash Analysis

(Please see APPENDIX 1 for English summary)

电力体制改革持续深化，相关政策加速落地。近年来，从深化燃煤发电上网电价市场化改革、到加快推进电力现货市场建设，再到今年 5 月份发布的第三监管周期输配电价改革，电力行业不断取得突破性进展，电价机制进一步完善，确立了以“准许成本+合理收益”为核心的输配电价监管制度框架，取消了工商业目录销售电价，为发挥市场在资源配置中的决定性作用创造了条件。我国分别于 2010 年、2017 年发布了两版电力需求侧管理办法，并在 2011 年发布《有序用电管理办法》，今年 5 月修订的电力需求侧管理办法和电力负荷管理办法均新增了“需求响应”这一章节，强调提高电力系统灵活性，保障电力系统安全稳定运行，促进可再生能源电力消纳。7 月 11 日，中央全面深化改革委员会第二次会议召开，会议审议通过了《关于深化电力体制改革加快构建新型电力系统的指导意见》，指明电力转型发展方向，对于中国未来体制机制创新发展具有重要意义。

2023 年开始，我国新型电力系统加速构建。今年 4 月 24 日，国家能源局综合司发布《关于加强新型电力系统稳定工作的指导意见（征求意见稿）》，提出大力提升新能源主动支撑能力，推动系统友好型电站建设，逐步实现新能源在电力供应和稳定支撑方面的可靠替代；协同推进大型新能源基地、调节支撑电源和外送通道开发建设，保障外送电力的连续性和稳定性。6 月 2 日，国家能源局组织发布《新型电力系统发展蓝皮书》，提出以 2030 年、2045 年、2060 年为构建新型电力系统的重要时间节点，制定新型电力系统“三步走”发展路径，有计划分步骤推进新型电力系统建设。

中央深改委第二次会议对于电力的指导意见主要体现 5 个要点：1. **保障国家能源安全：**要加强能源储备建设，持续加大能源领域的有效投资力度，加强能源产供储销体系建设，以保障国家应对紧急情况和重大事件时的能源安全；2. **新能源比重保持增长：**要科学合理设计新型电力系统建设路径，在新能源安全可靠替代的基础上有计划分步骤逐步降低传统能源比重，风电和光伏发电的装机预计会保持高比例增长；3. **保障电力的不间断供应：**迎峰度夏高峰期来临，火电压舱石作用凸显，火电机组的机电特性可为电力系统的稳定平衡贡献重要支撑，对保障供电可靠性具有重要意义；4. **加强电力技术和机制创新：**要健全适应新型电力系统的体制机制，推动加强电力技术创新、市场机制创新、商业模式创新，包括电力市场交易机制、辅助服务补偿机制等；5. **加强电力基础设施建设：**要推动有效市场和有为政府更好结合，不断完善政策体系，做好电力基本公共服务供给，做好新能源基地电站、电网等基础设施的建设。

五个要点中新能源比例保持增长意味着新能源消纳仍会面临较大压力，未来电力系统对储能及虚拟电厂等灵活资源的需求预计大幅增加。储能是构建新型电力系统的关键环节。最近进入迎峰度夏高峰期，高温预警不断，多地用电量创新高，电力供需矛盾不断凸显。南方电网在 7 月 10 日的最高电力负荷达 2.26 亿千瓦，创历史新高，比去年最高负荷增加 300 万千瓦。根据中电联的预测，2023 年全国最高用电负荷有望达 13.7 亿千瓦左右，若出现长时段大范围极端气候，最高用电负荷可能比 2022 年增加 1 亿千瓦左右，预计今年迎峰度夏期间全国电力供需总体紧平衡，部分区域用电高峰时段电力供需偏紧。

通过储能的规模化应用，电力系统由传统的源随荷动向源网荷储融合互动转变，从而实现电力的统筹协调，进一步解决电力供需不平衡等难题。电化学储能、抽水蓄能、压缩空气储能、氢储能等长短时储能技术有望迎来快速发展，同时，电力行业的源网荷储一体化和多能互补，也会促进共享储能、独立储能、虚拟电厂等商业模式的发展。

虚拟电厂有望促进新型电力系统实现灵活互动。我国虚拟电厂的发展开始于 2015 年，上海黄浦区启动了需求响应性虚拟电厂试点工作；去年，国家发改委、国家能源局印发《“十四五”现代能源体系规划》的通知，提出开展工业可调节负荷、楼宇空调负荷、大数据中心负荷、用户侧储能等各类资源聚合的虚拟电厂示范，力争到 2025 年，电力需求侧响应能力达到最大负荷的 3%-5%；今年 5 月，国家发改委发布《关于第三监管周期省级电网输配电价及有关事项的通知》，输配电价改革取得实质性突破，储能、虚拟电厂等主体的收益有望进一步提升。随着能源转型深入，伴随着新能源高比例接入电网，带来巨大调峰调频压力，虚拟电厂迎来巨大发展机遇。虚拟电厂不用实体设备发电，而是聚合各类用电负荷，实现电力负荷的组合、分析、优化和调度，可对大规模新能源电力进行高效利用。随着“双碳”政策的推进，虚拟电厂发展有着较为确定的市场空间，分布式能源和储能的建设有望稳定带动虚拟电厂市场规模的扩大。

投资建议：建议关注储能电池制造商【宁德时代】、【亿纬锂能】，特高压电气设备供应商【中国西电】。

风险提示：政策和需求不及预期，新能源装机不及预期。

APPENDIX 1

Summary

The reform of the power system continues to deepen, and the construction of a new power system is accelerated.

The reform of the power system continued to deepen, and relevant policies were accelerated. Beginning in 2023, the construction of China's new power system has been accelerated

The second meeting of the Central Deepening Reform Commission's guidance on electric power mainly reflects five points: 1. Guarantee national energy security; 2. Maintain growth in the proportion of new energy; 3. Ensure uninterrupted supply of electricity; 4. Strengthen power technology and mechanisms Innovation; 5. Strengthen the construction of electric power infrastructure.

The continued growth of the proportion of new energy in the five points means that the consumption of new energy will still face greater pressure. In the future, the demand for flexible resources such as energy storage and virtual power plants in the power system is expected to increase significantly. Energy storage is a key link in building a new power system. Virtual power plants are expected to facilitate the flexible interaction of a new power system.

Investment suggestion: Energy storage battery manufacturers: CATL, EVE; UHV electrical equipment suppliers: China XD Group

Risks: less-than-expected growth in demand and policy; less-than-expected new energy installed capacity.

附录 APPENDIX

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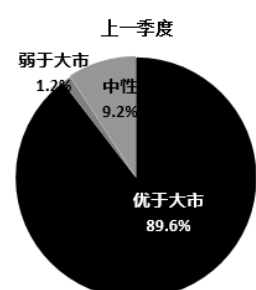
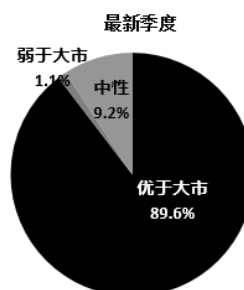
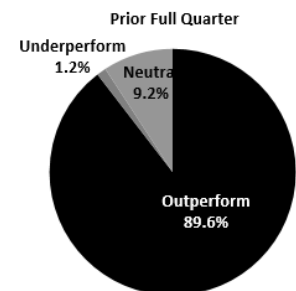
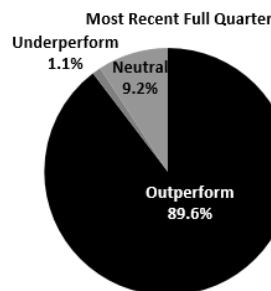
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各地股票基准指数：日本 – TOPIX, 韩国 – KOSPI, 台湾 – TAIEX, 印度 – Nifty100; 其他所有中国概念股 – MSCI China.

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