

Table of Contents

PART 1 EXECUTIVE SUMMARY	10	<ul style="list-style-type: none"> Southwest Power Pool (SPP) 49 New York Independent System Operator (NYISO) 51 Interregional collaboration 53
PART 2 SECTOR TRENDS, GROWTH AND INVESTMENT ANALYSIS	12	
2.1 Industry structure and key players	13	
<ul style="list-style-type: none"> Industry structure 14 Key federal institutions 15 Jurisdictional roles in the electricity industry 16 Reliability framework and operators 17 Transmission market structure 18 		
2.2 Policy and regulatory developments	19	
<ul style="list-style-type: none"> Introduction 20 Latest developments 21 National Transmission Planning Study 24 National Transmission Needs Study 25 National Interest Electric Transmission Corridors Study 26 Final Transmission Permitting Reform Rule 27 Offshore Wind (OSW) Study 28 Key FERC Initiatives 30 Order No. 1920 and Order No. 1920-A and 1920-B 31 		
2.3 RTO/TSO initiatives	32	
<ul style="list-style-type: none"> Key facts 33 ISO New England (ISO-NE) 34 Electric Reliability Council of Texas (ERCOT) 38 California Independent System Operator (CAISO) 41 Midcontinent Independent System Operator (MISO) 44 PJM Interconnection 47 		
2.4 Sector size and growth	54	
<ul style="list-style-type: none"> Growth in transmission line length, 2019-24 55 Growth in capital expenditure, 2019-24 57 		
2.5 Network growth and investment outlook	58	
<ul style="list-style-type: none"> Key growth drivers 59 Future demand and expected generation mix, 2025-35 60 Expected transmission network expansion, 2025-34 61 Forecasted investment in transmission network, 2025-27 63 		
2.6 Focus on offshore wind transmission	64	
<ul style="list-style-type: none"> Update on offshore wind sector 65 		
PART 3 KEY TRANSMISSION PLAYERS AND THEIR PERFORMANCE	66	
3.1 Trends in performance of leading utilities	67	
<ul style="list-style-type: none"> Overview 68 Growth in the transmission network 69 Financial performance <ul style="list-style-type: none"> – Revenue 72 – Net profits 75 – Return on equity 77 – Debt to equity ratio 78 – Profit margin 79 Trends in past capex 80 Key planned projects 81 		

Table of Contents

3.2 Utility profiles	84	PART 4 APPENDIX	115
• Ameren Corporation	85		
• American Electric Power (AEP)	86	4.1 Previous edition's information on OSW & policy	116
• American Transmission Company (ATC)	87	4.2 Sources and methodology	143
• Bonneville Power Administration (BPA)	88	4.3 List of acronyms	144
• CentrePoint Energy	89		
• Consolidated Edison (Con Edison)	90		
• Dominion Energy	91	PART 5 EXCEL DATABASE	
• Duke Energy	92	5.1 Key transmission players and their performance (Top 30 TSOs)	
• Entergy Corporation	93	5.2 Upcoming transmission project list (102 projects)	
• Evergy Incorporated	94		
• Exelon Corporation	95		
• FirstEnergy Corporation	96		
• ITC Holdings	97		
• MidAmerican Energy Company	98		
• National Grid USA	99		
• New York Power Authority (NYPA)	100		
• NextEra Energy	101		
• NorthWestern Energy	102		
• NV Energy	103		
• Oklahoma Gas and Electric Company (OG&E)	104		
• Oncor Electric Delivery	105		
• Pacific Gas and Electric Corporation (PG&E)	106		
• PacifiCorp	107		
• PNM Resources	108		
• PPL Corporation	109		
• Public Service Electric & Gas (PSE&G)	110		
• Southern California Edison (SCE)	111		
• Southern Company	112		
• Tennessee Valley Authority (TVA)	113		
• Xcel Energy	114		