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DEVICES5.2 USING ICT TO IMPROVE GRID RELIABILITY AND OPERATIONS; 5.3 USING ICT TO SUPPORT DISTRIBUTED GENERATION AND STORAGE; 5.4 REDUCING VULNERABILITY OF ICT AND ELECTRICITY INFRASTRUCTURES; Chapter Six CONCLUSIONS AND RECOMMENDATIONS; 6.1 ALIGNING EERE PROGRAMS AND PLANNING WITH ANTICIPATED ICT DEVELOPMENTS; 6.2 IMPROVING ELECTRICITY PROJECTIONS INVOLVING ICT; 6.3 IMPROVING ICT SCENARIOS FOR ENERGY PLANNING AND FORECASTING; Appendix A INFORMATION AND COMMUNICATIONS TECHNOLOGY SCENARIO MATRIX Appendix B ICT-RELATED ELECTRICITY USE PROJECTIONSREFERENCES

Sommario/riassunto

Increasing use of the Internet and other information and communications technologies (ICTs) marks a U.S. transition toward a ""digital society"" that may profoundly affect electricity supply, demand and delivery. RAND developed four 20-year scenarios of ICT evolution (2001?2021) for the U.S. Department of Energy and assessed their implications for future U.S. electricity requirements. Increased power consumption by ICT equipment is the most direct and visible effect, but not necessarily the most important. Over time, the effects that ICTs have on energy management, e-commerce, telework, and