Contents

Foreword vii
Preface ix
Acknowledgments xi

Chapter 1 From legacy to breakthrough 1
Chapter 2 The business side of AnyTown Energy 17
Chapter 3 Challenges for the GIS manager 33
Chapter 4 GIS capabilities for aiding electric distribution 53
Chapter 5 Developing the GIS data model from scratch 75
Chapter 6 HV/MV substations at the head of the chain 99
Chapter 7 The medium-voltage network at the heart of it 123
Chapter 8 The low-voltage network delivering the power 153
Chapter 9 Structural facilities: From poles to manholes 175
Chapter 10 Lining everything up: Basemaps and data 193
Chapter 11 The smart grid, meters, and customers 217
Chapter 12 Streamlined workflows and the full power of GIS 243
Epilogue 271

Appendix Basics of electric power 279
Glossary 295
Further readings 301
Index 307