

Table of Contents

Acronyms and Abbreviations5

Introduction8

Overview of the Smart Grid.....9

Why is the Smart Grid Needed?.....9

What is the Smart Grid?..... 11

Key Smart Grid Technologies 13

Smart Meters..... 14

Two-way Communication Networks 15

Meter Data Management Systems..... 17

Energy Management and Control Technology..... 18

Distribution/Substation Automation Technology..... 19

Integrated Solution Vendors21

Cooper Power Systems.....21

Comverge.....25

Elster Group29

GE Energy.....34

Itron38

Landis+Gyr.....43

Sensus48

Smart Meter Vendors.....53

Echelon53

muNet.....55

Silver Spring Networks57

SmartSynch.....61

Two-way Communication Network Vendors64

Aclara64

Ambient68

Arcadian Networks70

Current Group72

Eka Systems74

Tantalus.....76

Trilliant Networks.....78

Meter Data Management System Vendors	81
<i>Ecologic Analytics</i>	81
<i>eMeter</i>	83
<i>Energy ICT</i>	86
<i>Görlitz AG</i>	88
Energy Management and Control Technology Vendors	90
<i>Energate</i>	90
<i>Greenbox Technology</i>	92
<i>GridAgents</i>	93
<i>GridPoint</i>	95
<i>Honeywell Building Solutions</i>	99
<i>Site Controls</i>	101
<i>Tendril</i>	103
Distribution/Substation Automation Technology Vendors	106
<i>ABB</i>	106
<i>Advanced Control Systems</i>	109
<i>AREVA T&D</i>	112
<i>Augusta Systems</i>	114
<i>BPL Global</i>	116
<i>ESRI</i>	119
<i>Intergraph</i>	120
<i>NovaTech</i>	122
<i>Open Systems International</i>	124
<i>RuggedCom</i>	127
<i>S&C Electric</i>	128
<i>Schweitzer Engineering Laboratories</i>	132
<i>SensorTran</i>	134
<i>Siemens Energy</i>	136
<i>Telvent</i>	138