

**Table of Contents**

Acronyms and Abbreviations .....5

Introduction .....8

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 Vendors .....21

*Cooper Power Systems*.....21

*Comverge*.....25

*Elster Group* .....29

*GE Energy*.....34

*Itron* .....38

*Landis+Gyr*.....43

*Sensus* .....48

Smart Meter Vendors .....53

*Echelon* .....53

*muNet*.....55

*Silver Spring Networks* .....57

*SmartSynch*.....61

Two-way Communication Network Vendors .....64

*Aclara* .....64

*Ambient* .....68

*Arcadian Networks* .....70

*Current Group* .....72

*Eka Systems* .....74

*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&amp;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&amp;C Electric</i> .....	128
<i>Schweitzer Engineering Laboratories</i> .....	132
<i>SensorTran</i> .....	134
<i>Siemens Energy</i> .....	136
<i>Telvent</i> .....	138