

List of Smart Grid Benefits

| Benefit Category | Benefit Sub-category | Benefit |
|------------------|--------------------------|--|
| | Market Revenue | Energy Revenue |
| | | Capacity Revenue |
| | | Ancillary Services Revenue |
| Economic | | Optimized Generator Operation |
| | Improved Asset | Deferred Generation Capacity Investments |
| | Utilization | Reduced Ancillary Service Cost |
| | | Reduced Congestion Cost |
| | T&D Capital Savings | Deferred Transmission Capacity Investments |
| | | Deferred Distribution Capacity Investments |
| | | Reduced Equipment Failures |
| | T&D O&M Savings | Reduced T&D Equipment Maintenance Cost |
| | | Reduced T&D Operations Cost |
| | | Reduced Meter Reading Cost |
| | Theft Reduction | Reduced Electricity Theft |
| | Energy Efficiency | Reduced Electricity Losses |
| | Electricity Cost Savings | Reduced Electricity Cost |
| Reliability | Power Interruptions | Reduced Sustained Outages |
| | | Reduced Major Outages |
| | | Reduced Restoration Cost |
| | Power Quality | Reduced Momentary Outages |
| | | Reduced Sags and Swells |
| Environmental | Air Emissions | Reduced CO ₂ Emissions |
| | | Reduced SO _x , NO _x , and PM-2.5 Emissions |
| Security | Energy Security | Reduced Oil Usage |
| | | Reduced Wide-Scale Blackouts |