

AVANGRID / IBERDROLA - Portfolio of Projects under construction or recently energized				Updated:	22-Jun-17
Name	Investment	Location	Project Type, Size and Technology	Commercial Operation Date	References
AVANGRID					
Central Maine Power (CMP) Maine Power Reliability Program (MPRP)	\$1,405M	75 Municipalities between Elliot and Orrington, Maine	436 miles of new and rebuild Transmission Lines (345 and 115 kV): Overhead, Wood and Steel Poles, Fiber Optic, 1590 MCM and 1113 MCM Conductor; 6 new substations, 7 major expansions, 43 remote ends: Breaker and a Half, IEC-61850 protocol.	2015	Sara Burns, President – Central Maine Power; 83 Edison Dr., Augusta, ME 04330; (207) 623-3521
Lewiston Loop	\$71M	Lewiston/Auburn, Maine	A 115 kV expansion into Lewiston from Larrabee Rd SS to Lewiston Lower: New Middle St SS 115/34/12 kV; 4.3 miles of New 115 kV Overhead Line; 1.1 miles of New 115 kV Underground Line; Additional expansions.	2018	Sara Burns, President – Central Maine Power; 83 Edison Dr., Augusta, ME 04330; (207) 623-3521
Lakewood Project	\$18M	Madison, Maine	Rebuild the Lakewood Substation by adding a 115kv ring bus, a second 115/34.5kV transformer and replace the 34.5kV structures and breakers. This project also involved the construction of new line Section 264, rebuild of existing line Section 241B.	2015	Sara Burns, President – Central Maine Power; 83 Edison Dr., Augusta, ME 04330; (207) 623-3521
Berwick Reinforcements Project	\$13M	York County, Maine	Adding 2.3-mile 34kV transmission line. Constructing new Bassett Substation; Adding a new 34kV bay at the existing Quaker Hill Substation to receive Section 117. One 34.5-12.47kV outdoor power transformer, two 12.47kV distribution circuits.	2013 & 2017	Sara Burns, President – Central Maine Power; 83 Edison Dr., Augusta, ME 04330; (207) 623-3521
34kV Rebuilds Project	\$32M	Cumberland, Knox and Penobscot Counties, Maine	Rebuild of 30 miles of 34.5kV transmission lines, including Sections 5A, 48, 172 and 187.	2014 & 2015	Sara Burns, President – Central Maine Power; 83 Edison Dr., Augusta, ME 04330; (207) 623-3521
NERC Alert	\$38M	Entire service territory	Twenty-six transmission lines required a total of 408 structure replacements or raises to meet clearance requirements. Nine were 345 kV structures and 17 were 115kV. PhaseRaiser used for 108 structures and remaining were mostly replacements and a few midspans. MPRP covered an additional 121 corrections to eight lines (three 345kV and five 115kV).	2012, 2013 and 2014	Sara Burns, President – Central Maine Power; 83 Edison Dr., Augusta, ME 04330; (207) 623-3521
Blue Sky West Project	\$18M	Central Maine	New generation lead into Guilford Substation. Guilford Substation upgrade new 115kV bay and reconfiguration of ring bus. 27 miles of re-rate 115kV line section to Detroit Substation. SVC installed adjacent to Detroit Substation and connected in at Detroit.	2016	Sara Burns, President – Central Maine Power; 83 Edison Dr., Augusta, ME 04330; (207) 623-3521
Saco Bay	\$36.9 M	Saco and Old Orchard Beach, Maine	Addition of seven miles radial 115kV transmission line and associated infrastructure, including substations; two new sections of 115kV transmission lines; six relocated sections of 34.5 kV transmission lines; two new "green-field" 115kV transmission lines; two modified "brown-field" substations, 34.5 & 115kV; removal of two 34.5kV substations.	2012	Sara Burns, President – Central Maine Power; 83 Edison Dr., Augusta, ME 04330; (207) 623-3521
South Gorham	\$27.2M	Gorham, Maine	Installation of 345kV autotransformer with remote end work and control house expansion / relay updates.	2010	Sara Burns, President – Central Maine Power; 83 Edison Dr., Augusta, ME 04330; (207) 623-3521
Section 241	\$39.1M	Winslow, Maine	Phase I included re-rating two segments, Section 38 (completed in 2014) and Section 38B (completed in 2014:) and a complete re-build of Section 242 between the Winslow S/S and the Heywood S/S. Completed November, 2015.	2015	Sara Burns, President – Central Maine Power; 83 Edison Dr., Augusta, ME 04330; (207) 623-3521
Coopers Mill Statcom	\$51.7M	Windsor, Maine	Coopers Mills has been chosen by ISO-NE as a site for a new STATCOM based on the Greater Boston Needs Assessment study. The addition of this STATCOM will require expansions to the 345kV breaker and a half bus involving the construction of a new breaker and a half rung, rework Section 3024 conductor onto new deadend structure, and the installation among others of two 362kV IPO circuit breakers, eight 345kV switches, and steel structures.	2018	Sara Burns, President – Central Maine Power; 83 Edison Dr., Augusta, ME 04330; (207) 623-3521
NERC Alert (II)	\$105M	Entire service territory (ME, NY)	The target of the program is to evaluate Priority III 115kV Lines and determine facility ratings based on the actual field conditions. If issues are found, the program will correct them.	2021	Sara Burns, President – Central Maine Power; 83 Edison Dr., Augusta, ME 04330; (207) 623-3521
Substation Modernizations	\$45M	Entire service territory (ME)	This project is a substation rebuild project to replace several distribution substations in CMP's territory that have age/condition issues that are in need of attention.	2020	Sara Burns, President – Central Maine Power; 83 Edison Dr., Augusta, ME 04330; (207) 623-3521
Rochester Gas and Electric (RGE)					
Rochester Area Reliability Program (RARP)	\$254M	Rochester, New York (USA)	20 miles of new and rebuild Transmission Lines (345 and 115 kV) Overhead & Underground; 1 new substation, 3 major expansions, 2 remote ends; Breaker and a Half, IEC-61850 protocol, GIS Switchyard	2017	Carl Taylor, President – Rochester Gas & Electric; 89 East Avenue, Rochester NY 14604; (800) 743-2110
Station 56	\$21M	Rochester, New York (USA)	1 new Transformer (22MV 115/12kV) and upgrade of the 12kV yard, including the relocation of the existing transformer, new 12kV GIS and new Power Room. IEC-61850 protocol. Rebuild of the distribution lines (C267, C268 and C402) to convert from 4kV to 12kV.	2015 Phase 1 2016 Phase 2	Carl Taylor, President – Rochester Gas & Electric; 89 East Avenue, Rochester NY 14604; (800) 743-2110
Station 23	\$145M	Rochester, New York (USA)	Rebuild the existing Station 23. Build the new 34.5kV lines 802 and 803, two new 115kV/34kV Transformers and switchgear at Station 23. Upgrade line 901 from 210 MVA to 400 MVA. Install a 115kV 230 MVA PST at Station 42. New fiber optic. DNP 3 protocol.	2018	Carl Taylor, President – Rochester Gas & Electric; 89 East Avenue, Rochester NY 14604; (800) 743-2110
Station 80 1T, 3T Replacements	\$13M	Rochester, New York (USA)	This project encompasses replacing two 345/115 kV, 200 MVA transformers with new 420MVA units including oil containment, circuit breakers, switches, protection equipment and 2,000 ft. of aluminum bus. 1T placed in service on 5/6/13.	2013	Carl Taylor, President – Rochester Gas & Electric; 89 East Avenue, Rochester NY 14604; (800) 743-2110
Station 136 Add Transformer and 12kV Circuits	\$7.3M	Rochester, New York (USA)	ST 136 is an existing substation located east of the city of Rochester in the Town of Webster. The scope of the project is to install a new 22.4MVA transformer, new 34.5kV and 12kV switchgear and expand the existing control house. Associated with this project is the installation on three new 12kV lines in the Webster area.	2013	Carl Taylor, President – Rochester Gas & Electric; 89 East Avenue, Rochester NY 14604; (800) 743-2110
Webster East New 12kV Source	\$6.6M	Rochester, New York (USA)	Webster East New 12kV Source: Install a 34/12kV, 22 MVA transformer. 3 new 12kV circuits, & the conversions of three existing 4kV is part of the project. Establish a new 12kV source in the eastern area of the Town of Webster. Install a 34.5-12kV, 22 MVA transformer at Station 424 and install three new 12kV circuit positions. The 12kV bus will be established after the completion of the 115kV expansion that is planned for Station 424, and then the necessary conversions of three existing 4kV circuits will be undertaken. The project includes both substation work at Station 424 and distribution work for three circuits. A portion of the substation construction was completed in 2008. Work was stopped in January 2009. The engineering resumed in late Fall of 2010. The original Team NY standards are being used for this project.	2012	Carl Taylor, President – Rochester Gas & Electric; 89 East Avenue, Rochester NY 14604; (800) 743-2110
Station 124 SVC	\$23.6M	Rochester, New York (USA)	Expand existing Station 124 eastward to install a 115kV +200/-100 Mvar Static VAR Compensator (SVC) to provide dynamic voltage support during system contingencies, improve transfer capability across the transmission system and prevent overvoltage during light load conditions due to the capacitance of nearby 115kV cables and area generation.	2013	Carl Taylor, President – Rochester Gas & Electric; 89 East Avenue, Rochester NY 14604; (800) 743-2110

New York State Electric & Gas (NYSEG)					
Agro Farma	\$15.1M	Binghamton, New York (USA)	New 46 kV Line Position in County Line Substation and build a new 46kV Transmission line#834, a brand new 46/15 kV Columbus Substation and modify existing Distribution lines; Dismantling of the existing South Edmeston substation and relocation of the existing 46 kV Transmission Line#830 to the new Columbus Substation.	2013	
Auburn Transmission Project	\$105M	Cayuga and Onondaga Counties, New York	NYSEG's ability to ensure reliable service to customers in its Auburn Division is dependent on at least one of the generating units at the Cayuga Generating Facility in Lansing, owned by a subsidiary of AES Corporation ("AES"), being available to operate. This dependency exists only because of limitations on transmission to the area. To eliminate these transmission limitations and enable NYSEG to maintain adequate normal and single contingency service throughout the Auburn Division during extended outages (planned or forced) of a single unit at the Cayuga Generating Facility, NYSEG to reinforce its electric transmission system in the Auburn Division by constructing a new approximately 14.5 mile, 115kV transmission line from National Grid's Elbridge Substation to NYSEG's State Street Substation. This new line not only addresses the above transmission limitations, but it also increases the short circuit and strengthen the transmission system throughout the Auburn Division and lessen NYSEG's dependency on the aged National Grid 115kV trunk lines. The Project also addresses rebuilding portions of NYSEG and National Grid 115kV L971 and L972.	2017	Carl Taylor, President – Rochester Gas & Electric; 89 East Avenue, Rochester NY 14604; (800) 743-2110
New York Transco -Marcy South Series Compensation-	\$69M	Fraser, New York (USA)	<p>The overall scope of the Marcy South Series Compensation project involves the installation of series capacitor banks and upgrades to the 345kV lines connecting the Marcy, Edic, Fraser, and Coopers Corner substations, in order to increase the transmission line capacity of this portion of the network.</p> <p>For NYSEG, the Marcy South Series Compensation (MSSC) project built a 240 MVAR capacitors bank "station", in the vicinity of Fraser substation, connected in series compensation to the NYSEG-owned 345 kV FCC-33 Transmission Line, as well as re-conductor 22 miles long section, from structure #17 to #177, of the 46.6 miles long NYSEG-owned 345 kV FCC-33 single circuit, between Fraser and Coopers Corners substations (replacing the existing single 2156 ACSR conductor) .</p> <p>These improvements increase the thermal transfer limits of the FCC-33 circuit to an ampacity of approximately 2500A, and all under rated equipment upgraded to handle the new nominal rating, as well as all line relaying and communications equipment associated with the affected remote ends also upgraded at NYSEG owned Fraser, Coopers Corners and Oakdale substations.</p>	2016	Carl Taylor, President – Rochester Gas & Electric; 89 East Avenue, Rochester NY 14604; (800) 743-2110
NERC Alert	\$14.8 M	Binghamton, New York (USA)	The scope of the project is to analyze the 230 kV and 345 kV NYSEG-owned Transmission Lines in its service territory in order to identify the clearance violation points according to National Electric Safety Code (NESC) and execute a solution to eliminate the violations.	2013	
SGIG/DOE Cap Bank Installations	\$14.0 M	Binghamton, New York (USA)	Add DOE Stimulus capacitor banks at Morgan, Amawalk, Ridge Road, Big Tree, Mountaindale and Ashley Rd. The Smart Grid Capacitor Bank Program comprises the installation of 13 new 115KV switched capacitor banks, 13-115KV Independent Pole Operated circuit breakers, associated motor operated disconnect switches, relay protection equipment and several new control houses or control house additions at six existing NYSEG substations. Total reactive capability of the NYSEG system will increase by approximately 410 MVars. Ridge road was placed in service 3/28/13.	2014	

United Illuminating (UI)					
Grand Avenue Infrastructure Replacement	\$55M	New Haven, CT	This project was undertaken to address several asset condition and operation issues with meeting short circuit equipment capability requirements. This included the installation of a 4 bay breaker and a half 115kV GIS station with associated protection systems, line terminations, and remote end protection and control upgrades. This project was constructed bringing the station up to BPS compliance.	2012	Tony Marone, President & CEO – UIL 180 Marsh Hill Road, Orange CT 06477 (203) 499-2032
Baird Substation Infrastructure Replacement	\$30M	Stratford, CT	This project is a 115kV to 13.8kV substation rebuild of an existing substation that was constructed in 1964. The rebuild will address limited clearances to energized equipment, National Electric Safety Code (NESC) requirements overly-congested control house; fixed tap transformers replacements with LTC transformers; & the 115 kV and 13.8 kV bus nearing its thermal capacity.	2018	Tony Marone, President & CEO – UIL 180 Marsh Hill Road, Orange CT 06477 (203) 499-2032
New Trumbull 115 kV/13.8kV Substation	\$26M	Trumbull, CT	The construction of Trumbull 115/13.8 kV Substation was completed in 2008 to alleviate a capacity deficiency in Trumbull region. The substation provides approximately 58 MVA of capacity in the Trumbull area. This project consisted of an outdoor, air-insulated, 115/13.8 kV switchyard with two 24/32/40 MVA, 115/13.8 kV transformers with load tap changers and three 115 kV circuit breakers in a ring bus configuration.	2008	Tony Marone, President & CEO – UIL 180 Marsh Hill Road, Orange CT 06477 (203) 499-2032
Pootatuck 115/13.8 kV Substation	\$40M	Shelton, CT	The construction of Pootatuck 115/13.8 kV Substation was completed in 2015 to alleviate a capacity deficiency in Shelton region. The substation provides approximately 72 MVA of capacity in the Trumbull area. This project consisted of an outdoor, air-insulated, 115/13.8 kV switchyard with two 30/40/50 MVA, 115/13.8 kV transformers with load tap changers and one 115 kV circuit breaker.	2015	Tony Marone, President & CEO – UIL 180 Marsh Hill Road, Orange CT 06477 (203) 499-2032
Singer Substation	\$130M	Bridgeport, CT	This project was done to address transmission congestion issues and improve the reliability of Connecticut's transmission infrastructure. It consisted of - 345kV GIS, (16) circuit breakers,(2) 600 MVA auto-Transformers, (4) 50-100 MVAr Shunt Reactors, 115KV UG XLPE circuits to Bridgeport Energy and Pequonnock, Building and control room. (1) Spare 600 MVA Auto-Transformer, (1) Spare 50-100 Shunt Reactor.	2008	Tony Marone, President & CEO – UIL 180 Marsh Hill Road, Orange CT 06477 (203) 499-2032
Middle Town to Norwalk	\$196M	Bridgeport, CT	This project was done to address transmission congestion issues and improve the reliability of Connecticut's transmission infrastructure. It consisted of - 345KV Underground – 6.1 miles of double circuit 345kV UG XLPE, 36 splice chambers including fiber optics.	2008	Tony Marone, President & CEO – UIL 180 Marsh Hill Road, Orange CT 06477 (203) 499-2032
Housatonic River Crossing Transmission Line Replacement	\$20M	Milford, CT	This project was done to address aging infrastructure and NESC loading criteria. A conceptual design assessment has been initiated for replacing the Housatonic River transmission structures which carry two 115 kV transmission circuits along the railroad corridor from New Haven to Bridgeport, CT. These structures were built in 1912 and have shown signs of corrosion, and do not meet current NESC loading criteria. Concerns have also been raised if a structural failure occurred there would be significant transmission system impacts and issues related to the close proximity to the Moses Wheeler Bridge.	2017	Tony Marone, President & CEO – UIL 180 Marsh Hill Road, Orange CT 06477 (203) 499-2032
Baird-Congress Transmission Line Rebuild	\$58M	Bridgeport, CT	In coordination with ISO-NE and Northeast Utilities, a long-term transmission planning reliability assessment of Southwest Connecticut ("SWCT Needs Assessment") was completed in 2011 which identified unacceptable thermal overloads on the 8809A and 8909B 115 kV line sections between Congress and Baird Substations. This project addresses the thermal upgrades to the 8809A and 8909B 115 kV line sections between Congress and Baird Substations (4.6 circuit miles).	2019	Tony Marone, President & CEO – UIL 180 Marsh Hill Road, Orange CT 06477 (203) 499-2032
Milvon-Devon Tie Transmission Line Rebuild	\$25M	Milford, CT	In coordination with ISO-NE and Northeast Utilities, a long-term transmission planning reliability assessment of Southwest Connecticut ("SWCT Needs Assessment") was completed in 2011 which identified unacceptable thermal overloads on the 88005A and 89005B 115 kV line sections between Devon Tie and Milvon Substations. This project reconductored/rebuilt the 88005A and 89005B 115 kV line sections between Devon Tie and Milvon Substations (2.6 circuit miles)	2016	Tony Marone, President & CEO – UIL 180 Marsh Hill Road, Orange CT 06477 (203) 499-2032
Mix Ave Cap & Reactor Addition	\$22M	Hamden, CT	The Southwest Connecticut Transmission planning study indicated that capacitor banks are needed at Mix Avenue 115 kV substation to mitigate low voltages in the Mix Ave. - Sackett 115 kV corridor. The series reactor is needed to help restrict power flow in the Sackett - Mix Ave. 115 kV corridor. This restriction will help keep power flow within the thermal ratings of the corridor. Refer to ISO-NE "SWCT Area Transmission Needs Assessment" report dated July 13, 2011 and "SWCT Preferred Solution - New Haven and Bridgeport Areas" PAC presentation dated June 19, 2012.	2016	Tony Marone, President & CEO – UIL 180 Marsh Hill Road, Orange CT 06477 (203) 499-2032
Grand Ave 8300 Line Rebuild	\$16M	New Haven, CT	Nature and Characteristics of Needs: The recently completed SWCT Needs Analysis study identified a number of thermal and voltage needs including many in the New Haven area. To address this need the 8300 line terminal was reconfigured	2013	Tony Marone, President & CEO – UIL 180 Marsh Hill Road, Orange CT 06477 (203) 499-2032
East Shore TXF / PDC / Bus replacement	\$24M	New Haven, CT	The East Shore 115/13.8 kV Substation Capacity Upgrade Project completed in 2013 brought the region capacity level below 95% addressing the projected capacity deficiency. East Shore 115/13.8 kV Substation Capacity Upgrade in 2013 will provide additional regional capacity. The East Shore 115/13.8 kV Substation Capacity Upgrade project includes replacing the non-load tap changing substation transformers with load tap changing units and increasing the rating of these transformers.	2013	Tony Marone, President & CEO – UIL 180 Marsh Hill Road, Orange CT 06477 (203) 499-2032
NERC FAC-008 Compliance	\$19 M	Various locations across CT	As a result of this NERC alert, UI engaged GeoDigital to perform a LiDAR survey of all of UI's OH transmission lines to identify potential line clearance violations that could impact UI's line ratings. This project remediated all of the identified clearance violations.	2016	Tony Marone, President & CEO – UIL 180 Marsh Hill Road, Orange CT 06477 (203) 499-2032

Scottish Power Energy Networks					
Western HVDC Link	\$736M	West Scotland (Irish sea) (UK)	New 400 kV double busbar substation at Hunterston (6L+Bus Bar Coupler and Bus Bar Section); New HVDC converter station at Hunterston, capacity 2250MW; Onshore and offshore HVDC cable to SPT/NGET boundary. 2200MW Cable route length between Hunterston and Scottish Territorial Waters Boundary is approximately 4km onshore and 90km offshore i.e. 94km total. (approx. 35% of total cable length).	2017	Pearse Murray, Director of Scottish Power Transmission Ochil House, Technology Park, High Blantyre, South Lanarkshire, G72 0FD Pearse.Murray@ScottishPower.com Tel: (+44) 7753621585
Beauly – Denny 400kV	\$278M	Denny (North East Scotland) (UK)	Install 20km of new 400kV overhead line from Denny North to SPT / SHETL boundary; Remove 17km of existing 132kV overhead line to SPT / SHETL boundary and underground sections of existing 132kV overhead network in the Stirling area. Install a new two bay 400kV double busbar substation at Denny North (1L + 1T). Install a new nine bay 275kV double busbar at Denny North (5L, 2T + Bus Coupler + Section). Install new transformation: 1 x 400/275kV 1000MVA and 1 x 275/132kV 240MVA at Denny North.	2017	Pearse Murray, Director of Scottish Power Transmission Ochil House, Technology Park, High Blantyre, South Lanarkshire, G72 0FD Pearse.Murray@ScottishPower.com Tel: (+44) 7753621585
Renewable Generation in South West Scotland	\$430M	South West Scotland (UK)	Develop New Infrastructure to facilitate renewable generation (9 Wind Farms). 5 New "Collector" Substations (1 * 275/132kV; 4 * 132/33kV). 2 New 132/33kV Substations for individual connections 14km of new 275kV overhead line. 13 New Transformers ( 3 * 275/132kV 240MVA SGTs; 10 * 132/33kV 90MVA) 60km of new 132kV overhead line. Extend Coylton 275kV Substation in a six bay single busbar configuration (5L + Bus Section). Reconductor 14km 275kV OHL (Coylton-Kilmarnock).	2017	Pearse Murray, Director of Scottish Power Transmission Ochil House, Technology Park, High Blantyre, South Lanarkshire, G72 0FD Pearse.Murray@ScottishPower.com Tel: (+44) 7753621585
Shunt Compensation of the Scotland – England Interconnection (Part of Upgrade from 2800MW to 3300MW Secure Export Capability from Scotland)	\$30M	Southern Scotland (UK)	Install five Mechanically Switched Capacitor Damping Networks (MSCDN's) totaling 1050MVA at the following locations: Install 1 x 275kV 150MVA MSCDN at Windyhill 275kV Substation Install 1 x 400kV 225MVA MSCDN at Elvanfoot 400kV Substation Install 1 x 400kV 225MVA MSCDN at Moffat 400kV Substation Install 2 x 275kV 225MVA MSCDN's at Longannet 275kV Substation Install a wide area MSCDN control scheme	2015	Pearse Murray, Director of Scottish Power Transmission Ochil House, Technology Park, High Blantyre, South Lanarkshire, G72 0FD Pearse.Murray@ScottishPower.com Tel: (+44) 7753621585
Series and Shunt Compensation of the Scotland – England Interconnection (Part of Upgrade from 3300MW to 4400MW Secure Export Capability from Scotland)	\$82M	Southern Scotland (UK)	Install four 400kV Series Capacitors totaling 2004MVA, each equipped with passive damping filters for Sub-Synchronous Resonance (SSR) mitigation, at the following locations: Install 1 x 400kV 560MVA Series Capacitor at Gretna 400kV Substation Install 1 x 400kV 560MVA Series Capacitor at Moffat 400kV Substation Install 2 x 400kV 442MVA Series Capacitors at Eccles 400kV Substation Install a wide area Series Capacitor control scheme Install Sub-Synchronous Oscillation (SSO) monitoring / detection equipment Install 1 x 275kV 225MVA MSCDN at Cockenzie 275kV Substation	2015	Pearse Murray, Director of Scottish Power Transmission Ochil House, Technology Park, High Blantyre, South Lanarkshire, G72 0FD Pearse.Murray@ScottishPower.com Tel: (+44) 7753621585
Iberdrola Spain					
Plan Murcia	38,9 MM€	Murcia Capital	Construction a new compact GIS substation (ST Murcia) with a new 220/20 kV transformer module (2x50 MVA installed) and a new very high voltage underground transmission line ST El Palmar-ST Murcia (8 km long, 220 kV, double circuit)	2016	Nekane Dorronsoro Paulis ndorronsoro@iberdrola.es Tel: (+34) 630923500 Iberdrola Distribución Eléctrica Avda. Los Pinos 7, A1P01C013 30009 Murcia - Spain
Plan Valencia	78,2 MM€	Valencia Capital	Construction four new compact GIS substations (ST Beniferri, Aqua, Parque Central, Fuente San Luis), two of them underground, with 220/132 kV (450 MVA) and 220/20 kV (600 MVA) transformer modules, and a new very high voltage underground transmission line Fuente San Luis-Parque Central-Aqua-Beniferri (12.9 km long, 220 kV, single circuit and 3.7 km long, 220 kV, double circuit)	2011 - 2017	Nekane Dorronsoro Paulis ndorronsoro@iberdrola.es Tel: (+34) 630923500 Iberdrola Distribución Eléctrica Avda. Los Pinos 7, A1P01C013 30009 Murcia - Spain
Plan Madrid (Fase 1)	60 MM€	Madrid Capital	Construction four new compact GIS substations (ST Ventas, Melancolicos, Palafox, La Estrella), with 220/132 kV (450 MVA) and 220/20 kV (600 MVA) transformer modules, and a new very high voltage underground transmission line Ventas-Melancolicos-Palafox-La Estrella (40 km long, 220 kV, single circuit)	2007-2010	Amaya Campini Jiménez acampini@iberdrola.es Tel: (+34) 618777428 Iberdrola Distribución Eléctrica Tomás Redondo 1, A1P4C029 28033 Madrid - Spain
Plan Madrid (Fase 2)	52,9 MM€	Madrid Capital	Construction three new compact GIS substations (ST Parque Ingenieros, Antonio Leyva, Arganzuela), with 220/20 kV (400 MVA) transformer modules, and a new very high voltage underground transmission line Villaverde-Parque Ingenieros-Antonio Leyva-Arganzuela-Melancolicos (15,2 km long, 220 kV, single circuit)	2009-2012	Amaya Campini Jiménez acampini@iberdrola.es Tel: (+34) 618777428 Iberdrola Distribución Eléctrica Tomás Redondo 1, A1P4C029 28033 Madrid - Spain
Plan Madrid (Fase 3)	46,9 MM€	Madrid Capital	Construction two new compact GIS substations (ST Aguacate y Poligono C), one of them underground, with 220/45 kV and 220/20 kV transformer modules, and a new very high voltage underground transmission line Parque Ingenieros-Aguacate-Poligono C-Ventas (15.5 km long, 220 kV, single circuit)	2009-2014	Amaya Campini Jiménez acampini@iberdrola.es Tel: (+34) 618777428 Iberdrola Distribución Eléctrica Tomás Redondo 1, A1P4C029 28033 Madrid - Spain