2.9 Annex

SP Energy Networks 2015–2023 Business Plan

Zonal maps and programmes of work

SP Energy Networks

June 2013

SP ENERGY NETWORKS

NETWORK DIAGRAM KEY

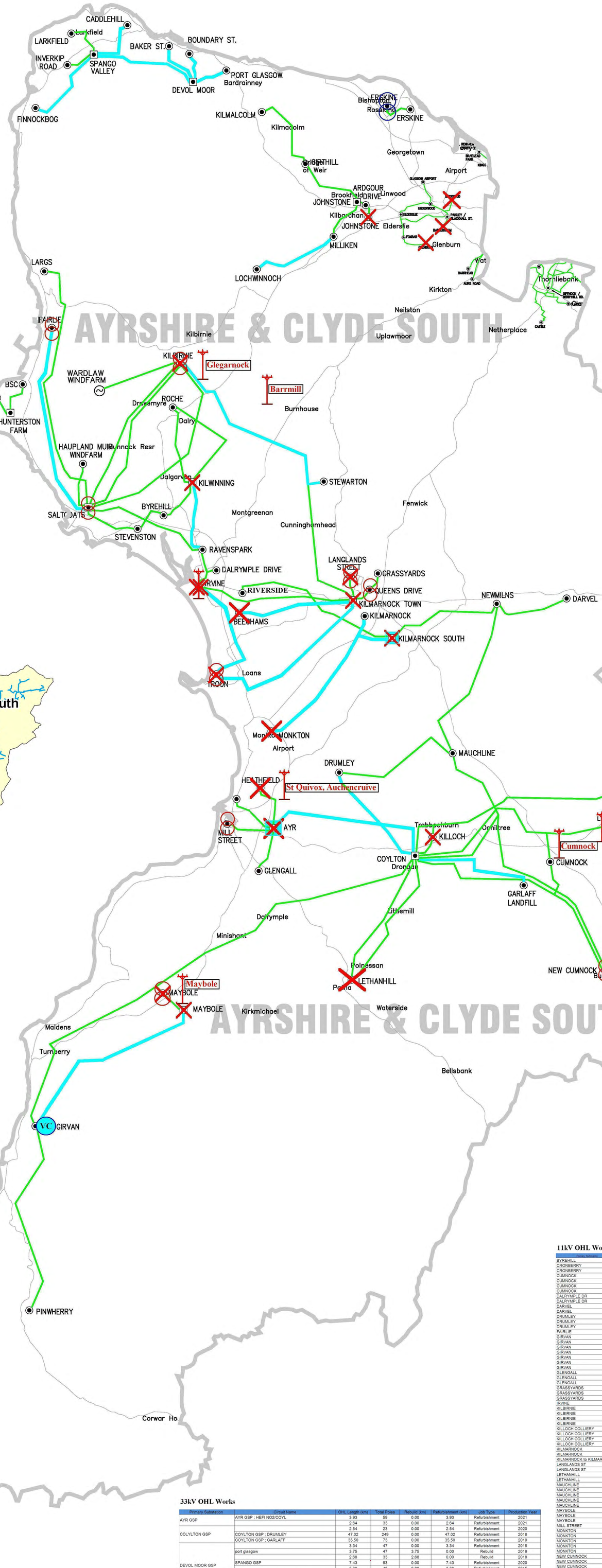
- Transformer (Load)
- Transformer (Non Load)
- VC — Voltage Control Device (Load)
- Switchgear (Non Load)
- Switchboard (Load)
- Village Modernisation
- 33kV OHL Works
- NCB Work Area
- 33kV Exisiting Network

Load Related Primary Projects

Project Title	Substation Name	Asset Type	Job Type	Number
Ayr 33kV Fault Level Resolution	Ayr Grid	Switchboard	Fault Level	1
Erskine Reinforcement	Erskine GSP	Transformer	Reinforcement	2
		Circuit	Reinforcement	2
Girvan Primary Substation Voltage Reinforcement	Girvan Primary Substation	Voltage Control Device	Reinforcement	1
Kilmarnock South 33kV Fault Level Resolution	Kilmarnock South GSP	Switchboard	Fault Level	1

Non-Load Related Primary Projects

Primary Name	Asset Type	Job Type	Number
AYR GRID	Switchgear	Replacement	1
BARTERHOLM PRIMARY	Switchgear	Replacement	1
BEECHAMS 33 SWITCHING S/S	Switchgear	Replacement	1
FAIRLIE	Transformer	Replacement	1
GLENBURN PRIMARY	Switchgear	Replacement	1
HEATHFIELD RD AYR	Switchgear	Replacement	1
IRVINE	Switchgear	Refurbishment	1
	Switchgear	Replacement	1
JOHNSTONE PRIMARY	Switchgear	Replacement	1
KILBIRNIE	Switchgear	Replacement	1
	Transformer	Replacement	1
	Transformer	Refurbishment	1
KILLOCH COLLIERY	Switchgear	Refurbishment	1
KILMARNOCK KV	Switchgear	Refurbishment	1
KILMARNOCK SOUTH GRID	Switchgear	Replacement	1
KILWINNING GRID	Switchgear	Replacement	1
LANGLANDS ST PRIMARY	Switchgear	Refurbishment	1
	Transformer	Replacement	1
LETHANHILL	Switchgear	Refurbishment	1
MAYBOLE	Switchgear	Retrofit	1
	Transformer	Replacement	1
MAYBOLE GRID	Switchgear	Replacement	1
MILL STREET	Transformer	Replacement	1
MONKTON	Switchgear	Refurbishment	1
NEW CUMNOCK TEMP	Transformer	Replacement	2
QUEENS DRIVE PRIMARY	Transformer	Replacement	1
SALTCOATS MAIN	Transformer	Replacement	1
SHERWOOD PRIMARY	Switchgear	Replacement	1
TROON	Switchgear	Replacement	1
	Transformer	Replacement	2



33kV OHL Works

Primary Substation	Circuit Name	OHL Length (km)	Total Poles	Rebuild (km)	Refurbishment (km)	Job Type	Production Year
AYR GSP	AYR GSP ; HEFI NO2/COYL	3.93	59	0.00	3.93	Refurbishment	2021
		2.64	33	0.00	2.64	Refurbishment	2021
		2.54	23	0.00	2.54	Refurbishment	2020
COLYTON GSP	COYLTON GSP ; DRUMLEY	47.02	249	0.00	47.02	Refurbishment	2016
	COYLTON GSP ; GARLAFF	35.50	73	0.00	35.50	Refurbishment	2019
DEVOL MOOR GSP		3.34	47	0.00	3.34	Refurbishment	2015
	port glasgow	3.75	47	3.75	0.00	Rebuild	2019
		2.68	33	2.68	0.00	Rebuild	2018
	SPANGO GSP	7.43	93	0.00	7.43	Refurbishment	2020
		3.36	48	0.00	3.36	Refurbishment	2015
	DEVOL MOOR GSP GRNK ; BAKER ST 1	3.77	45	0.00	3.77	Refurbishment	2016
		2.50	32	2.50	0.00	Rebuild	2017
		7.46	96	0.00	7.46	Refurbishment	2021
KILBIRNIE 33	KILBIRNIE 33KV ; STEWARTON 33	12.60	158	12.60	0.00	Rebuild	2019
		5.65	90	5.65	0.00	Rebuild	2018
KILMARNOCK SOUTH GSP	KILMARNOCK SOUTH GSP ; KILMARNOCK MAIN 2	12.43	131	12.43	0.00	Rebuild	2017
	KILMARNOCK SOUTH GSP ; KIMA 1 / MONK 2	12.78	163	12.78	0.00	Rebuild	2016
		8.90	110	0.00	8.90	Refurbishment	2017
	KILMARNOCK TOWN GSP ; BEECHAMS 2	7.34	108	0.00	7.34	Refurbishment	2015
		9.54	131	9.54	0.00	Rebuild	2018
	KILMARNOCK TOWN GSP ; BEECHAMS 3	8.39	109	0.00	8.39	Refurbishment	2019
	KILMARNOCK TOWN GSP ; GUDR / STRT 1	8.82	106	0.00	8.82	Refurbishment	2017
		2.63	29	2.63	0.00	Rebuild	2018
	KILMARNOCK TOWN GSP ; TROON 1/IRVINE 1	10.87	79	10.87	0.00	Rebuild	2017
KILWINNING GSP		8.38	110	0.00	8.38	Refurbishment	2015
	KILWINNING GSP ; IRVINE 1	5.91	66	5.91	0.00	Rebuild	2016
MAYBOLE GSP	MAYBOLE GSP ; GIRVAN NO.1	23.01	208	0.00	23.01	Refurbishment	2016
MILLIKEN	LOCHWINNOCH T1	6.32	74	0.00	6.32	Refurbishment	2020
	LOCHWINNOCH T1	6.32	73	0.00	6.32	Refurbishment	2020
NEW CUMNOCK 33		5.91	63	5.91	0.00	Rebuild	2018
	NEW CUMNOCK 33KV ; COYL/MALI/GALL 33	4.98	57	4.98	0.00	Rebuild	2018
	NEW CUMNOCK 33KV ; FAULDHEAD T2	15.42	183	0.00	15.42	Refurbishment	2022
NEWMILNS		8.610	1	8.61	0.00	Rebuild	2019
SALTCOATS "A" GSP		26.22	173	0.00	26.22	Refurbishment	2022
		1.47	37	0.00	1.47	Refurbishment	2017
		6.38	83	0.00	6.38	Refurbishment	2021
	SALTCOATS B ; FAIRLIE	13.54	155	0.00	13.54	Refurbishment	2016
SPANGO GSP	SPANGO GSP ; CADDLEHILL / FINNOCKBOG NO	8.73	111	0.00	8.73	Refurbishment	2017
	SPANGO GSP ; CADDLEHILL / FINNOCKBOG NO	8.66	112	0.00	8.66	Refurbishment	2020

11kV OHL Works

Primary Substation	Circuit Name	OHL Length (km)	Rebuild (km)	Re-conductor (km)	Refurbishment (km)	Production Year
BYREHILL	BYREHILL; CB UNMATCHED	0.07	0.00	0.00	0.07	2015 ED1
CRONBERRY	CRONBERRY;SMALLBURN	30.54	0.00	2.85	27.69	2019 ED1
CRONBERRY	CRONBERRY;VICTORY GATES	6.31	0.00	0.00	6.31	2020 ED1
CUMNOCK	CUMNOCK;DRUMBROCHAN	1.77	1.77	0.00	0.00	2015 ED1
CUMNOCK	CUMNOCK;ST CONVALS	1.89	0.00	0.44	1.45	2015 ED1
CUMNOCK	CUMNOCK;DUMFRIES HOUSE	5.00	0.00	0.00	5.00	2017 ED1
CUMNOCK	CUMNOCK;NEW CUMNOCK	37.35	0.00	2.20	35.15	2021 ED1
DALRYMPLE DR	DALRYMPLE DR;TANNSON/0015/1	2.11	0.00	0.00	2.11	2015 ED1
DALRYMPLE DR	DALRYMPLE DR;TARRYHOLME HOUSING	0.58	0.00	0.00	0.58	2021 ED1
DARVEL	DARVEL;DARVEL AUX. TX.	19.73	0.11	0.00	19.62	2018 ED1
DARVEL	DARVEL;QUARRIES	12.79	12.79	0.00	0.00	2021 ED1
DRUMLEY	DRUMLEY;MAUCHLINE RD MOSSBLOWN "T' TEMPLE HOUSE/ 734/11/1	1.85	0.00	0.00	1.85	2015 ED1
DRUMLEY	DRUMLEY;BROCKLEHILL AVE ANN/ 734/21/2	27.79	0.00	0.39	27.40	2016 ED1
DRUMLEY	DRUMLEY;LANGLANDS DRIVE TARBOLTON/ 734/23/2	37.19	0.00	2.98	34.21	2017 ED1
FAIRLIE	FAIRLIE;SOUTH ANNAN	20.42	0.00	0.00	20.42	2022 ED1
GIRVAN	GIRVAN;COALPORT ROAD OCB/ 0014/1	5.64	4.26	0.00	1.39	2016 ED1
GIRVAN	GIRVAN;NEW SCHOOL THE AVENUE	44.64	0.00	0.00	44.64	2016 ED1
GIRVAN	GIRVAN;DAILLY TOLL	33.71	0.00	12.25	21.45	2019 ED1
GIRVAN	GIRVAN;400ABSW/0017/1	40.10	0.00	0.00	40.10	2020 ED1
GIRVAN	GIRVAN;GIRVAN MAINS TREATMENT WORKS	1.79	0.00	0.00	1.79	2020 ED1
GIRVAN	GIRVAN;CRAIGHEAD QUARRY	9.01	0.63	0.00	8.37	2022 ED1
GIRVAN	GIRVAN;ALGINATE	2.03	0.00	0.00	2.03	2022 ED1
GLENGALL	GLENGALL;PRESTWICK CIRCUITS	3.00	0.00	0.00	3.00	2020 ED1
GLENGALL	GLENGALL;MAINHOLM/ 0014/1	19.39	0.00	0.00	19.39	2022 ED1
GLENGALL	GLENGALL;STH AYRSHIRE DIST GEN HOSPITAL/0024/1	0.84	0.00	0.00	0.84	2022 ED1
GRASSYARDS	GRASSYARDS;CRAUFURDLAND RD	0.12	0.00	0.00	0.12	2015 ED1
GRASSYARDS	GRASSYARDS;R.C. SCHOOL	9.59	0.00	0.00	9.59	2019 ED1
GRASSYARDS	GRASSYARDS;AB 275	34.15	0.00	0.00	34.15	2021 ED1
IRVINE	IRVINE;SHEWALTON SW STN	0.59	0.00	0.00	0.59	2022 ED1
KILBIRNIE	KILBIRNIE; CB UNMATCHED	16.06	0.00	0.00	16.06	2015 ED1
KILBIRNIE	KILBIRNIE; CB UNMATCHED	3.66	0.00	0.00	3.66	2018 ED1
KILBIRNIE	KILBIRNIE; CB UNMATCHED	13.22	0.00	0.00	13.22	2021 ED1
KILBIRNIE	KILBIRNIE; CB UNMATCHED	13.34	0.00	0.00	13.34	2021 ED1
KILLOCH COLLIERY	KILLOCH COLLIERY; CB UNMATCHED	10.04	0.00	0.52	9.52	2015 ED1
KILLOCH COLLIERY	KILLOCH COLLIERY;A/B673/0013/1	31.28	0.00	1.51	29.77	2017 ED1
KILLOCH COLLIERY	KILLOCH COLLIERY; CB UNMATCHED	17.75	0.00	1.31	16.44	2019 ED1
KILLOCH COLLIERY	KILLOCH COLLIERY; CB UNMATCHED	15.38	0.00	0.00	15.38	2023 ED1
KILMARNOCK	KILMARNOCK 33/11 KV;GAS WORKS NO 1	3.51	2.92	0.00	0.59	2016 ED1
KILMARNOCK	KILMARNOCK 33/11 KV;HEAD OFFICE	3.43	0.00	0.00	3.43	2021 ED1
KILMARNOCK to KILMARNOCK	KILMARNOCK 33/11 KV;BRITISH GAS/0015/1	17.49	0.00	0.00	17.49	2018 ED1
LANGLANDS ST	LANGLANDS ST PRIMARY;BALLIEHILL	1.00	0.00	0.00	1.00	2023 ED1
LANGLANDS ST	LANGLANDS ST PRIMARY;MORRISONS SUPERMARKET	1.43	0.00	0.00	1.43	2023 ED1
LETHANHILL	LETHANHILL; CB UNMATCHED	23.59	15.01	2.67	5.91	2018 ED1
LETHANHILL	LETHANHILL;hollybush/rankinston via a/b 694	36.06	0.00	2.55	33.51	2019 ED1
MAUCHLINE	MAUCHLINE;BARSKIMMING ENTRANCE/ 741/24/2	3.35	0.00	1.12	2.23	2019 ED1
MAUCHLINE	MAUCHLINE;BOGWOOD/ 741/21/2	22.17	0.00	0.37	21.80	2021 ED1
MAUCHLINE	MAUCHLINE;MAUCHLINE CREAMERY/ 741/22/2	1.65	0.00	0.00	1.65	2022 ED1
MAUCHLINE	MAUCHLINE;BALLOCHMILE/ 741/14/1	25.14	0.00	2.37	22.77	2022 ED1
MAUCHLINE	MAUCHLINE;WELTON ROAD/ 741/12/1	25.37	0.00	0.00	25.37	2023 ED1
MAYBOLE	MAYBOLE;DUNURE ARCB	25.90	0.00	2.62	23.28	2021 ED1
MAYBOLE	MAYBOLE; CB UNMATCHED	58.26	0.00	0.00	58.26	2023 ED1
MAYBOLE	MAYBOLE;COVENANTORS GAIT/0023/1	34.13	0.00	0.00	34.13	2023 ED1
MILL STREET	MILL STREET 33/11;FIRE STATION	0.07	0.00	0.00	0.07	2017 ED1
MONKTON	MONKTON;MONKTON VILLAGE/0022/1	4.58	0.00	0.00	4.58	2017 ED1
MONKTON	MONKTON;14 A/B/0017/1	43.60	0.00	8.95	34.65	2018 ED1
MONKTON	MONKTON;BROADMEADOWS/0021/1	1.91	0.00	0.00	1.91	2020 ED1
MONKTON	MONKTON;GREENSITE/0025/1	1.09	0.00	0.00	1.09	2020 ED1
MONKTON	MONKTON;CORONATION STREET/0026/1	1.24	0.00	0.00	1.24	2022 ED1
NEW CUMNOCK	NEW CUMNOCK TEMP;LIME ROAD GVR/747/21/2	17.00	4.22	0.00	12.78	2018 ED1
NEW CUMNOCK	NEW CUMNOCK TEMP;DALLEAGLES 'T' LOCAL TX/ 747/12/1	20.39	8.21	0.00	12.18	2022 ED1
NEW CUMNOCK	NEW CUMNOCK TEMP;AFTON BUILDINGS GVR/747/22/2	6.47	6.47	0.00	0.00	2022 ED1
NEWMILNS	NEWMILNS ;UNION STREET	3.24	0.00	0.00	3.24	2021 ED1
NEWMILNS	NEWMILNS ;GREENFIELD	3.92	0.00	0.00	3.92	2021 ED1
NEWMILNS	NEWMILNS ;VESUVIUS CRUCIBLE	10.22	0.00	0.00	10.22	2022 ED1
PINWHERRY	PINWHERRY 33/11KV;BARRHILL & BALLANTRAE	47.69	0.00	0.00	47.69	2017 ED1
PINWHERRY	PINWHERRY 33/11KV;BARRHILL	68.97	0.00	1.71	67.26	2018 ED1
PINWHERRY	PINWHERRY 33/11KV;BALLANTRAE	49.85	29.56	0.29	20.00	2018 ED1
QUEENS DRIVE	QUEENS DRIVE K/NOCK; CB UNMATCHED	2.53	0.00	0.00	2.53	2023 ED1
RAVENSPARK	RAVENSPARK;CENTRAL HOSPITAL	0.04	0.00	0.00	0.04	2016 ED1
RAVENSPARK	RAVENSPARK;ARDEER MAIN	8.14	0.00	0.00	8.14	2020 ED1
RAVENSPARK	RAVENSPARK;AYSHIRE METALS	0.13	0.00	0.00	0.13	2021 ED1
RIVERSIDE	RIVERSIDE;545 ABSW (MEADOWHEAD)/ 703/12/1	0.63	0.00	0.00	0.63	2015 ED1
SALTCOATS MAIN	SALTCOATS MAIN;EGLINTON SQUARE	1.73	0.00	0.00	1.73	2015 ED1
SALTCOATS MAIN	SALTCOATS MAIN;WHITELEES COURT	3.28	0.00	0.00	3.28	2015 ED1
STEVENSTON	STEVENSTON 33/11;MCGREGOR AVE	1.57	0.00	0.00	1.57	2015 ED1
STEWARTON	STEWARTON PRIMARY;LOCAL TX	6.06	4.22	0.00	1.84	2018 ED1
STEWARTON	STEWARTON PRIMARY;CRAIGNAUGHT LANDFILL SITE/ 0023/1	8.32	0.00	0.00	8.32	2022 ED1
TROON	TROON 33KV;BUCHAN ROAD	1.64	0.00	0.00	1.64	2016 ED1
TROON	TROON 33KV;OTTOLINE DRIVE	13.83	4.63	0.00	9.19	2019 ED1
TROON	TROON 33KV;SANDHILL GARDENS	0.10	0.00	0.00	0.10	2021 ED1

SP ENERGY NETWORKS

RIIO ED1 ZONE MAPPING

OPERATIONAL ZONE - GEOGRAPHICAL LAYOUT

AYRSHIRE &CLYDE SOUTH

33kV DISTRIBUTION NETWORK

VERSION 2
19/06/2013

CREATED BY: ANTHONY DONOGHUE
MODIFIED BY:BRENDAN GALLOWAY

11kV OHL Works

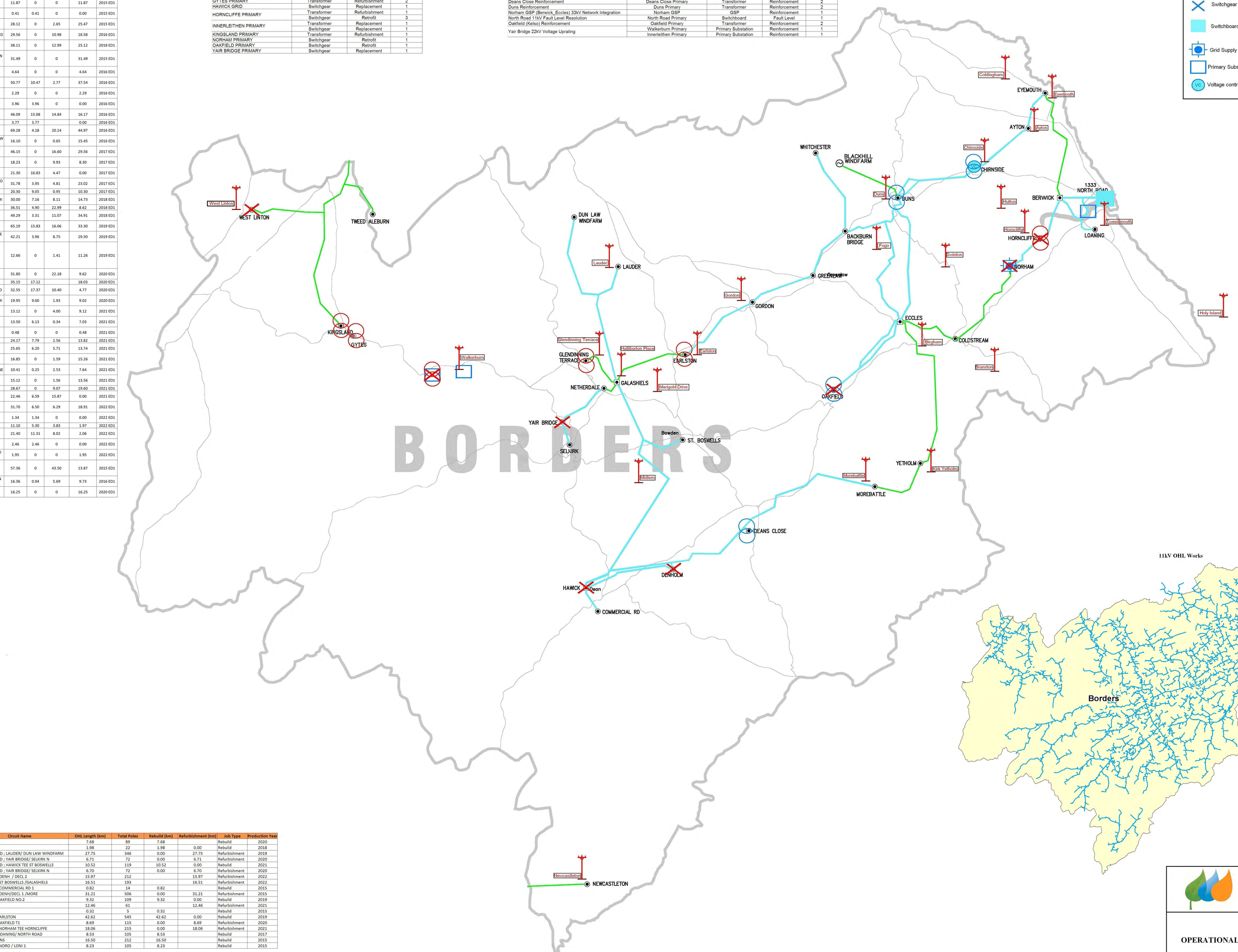
Circuit Ref No.	Primary Substation	Circuit Name	OHL Length (km)	Rebuild (km)	Re-conductor (km)	Refurbishment (km)	Production Year
SP11522	KINGSLAND	KINGSLAND PRIMARY;DALATHO UNIT A	12.20	0	1.86	10.34	2015 ED1
SP10425	NETHERDALE	NETHERDALE PRIMARY;TWEEDBANK SCHOOL	11.87	0	0	11.87	2015 ED1
SP10815	COMMERCIAL RD	COMMERCIAL RD PRIMARY; CB UNMATCHED	0.41	0.41	0	0.00	2015 ED1
SP12112	CHIRNSIDE	CHIRNSIDE PRIMARY;L226 ABSW TEE CHIRNSIDE MANSE	28.12	0	2.65	25.47	2015 ED1
SP10624	OAKFIELD	OAKFIELD PRIMARY;3 WAY BOARD	29.56	0	10.98	18.58	2016 ED1
SP11112	COLDSTREAM	COLDSTREAM PRIMARY;GALLOWSKNOWE LINE	38.11	0	12.99	25.12	2018 ED1
SP11524	KINGSLAND	KINGSLAND PRIMARY;CROSSBURN CARAVAN PARK	31.49	0	0	31.49	2015 ED1
SP12913	ST BOSWELLS	ST BOSWELLS PRIMARY;NEWTOWN	4.64	0	0	4.64	2016 ED1
SP10812	COMMERCIAL RD	COMMERCIAL RD PRIMARY; CB UNMATCHED	50.77	10.47	2.77	37.54	2016 ED1
SP10514	SELKIRK	SELKIRK PRIMARY;TWEED MILL NO2	2.29	0	0	2.29	2016 ED1
SP11213	LOANING to NORHAM	LOANING PRIMARY;LINDISFARNE GARDENS	3.96	3.96	0	0.00	2016 ED1
SP11423	DUNS	DUNS PRIMARY;SWINTON MILL LINE GCB	46.09	15.08	14.84	16.17	2016 ED1
SP10512	SELKIRK	SELKIRK PRIMARY;TANNAGE	3.77	3.77		0.00	2016 ED1
SP12915	ST BOSWELLS	ST BOSWELLS PRIMARY;L949 ABSW	69.28	4.18	20.14	44.97	2016 ED1
SP12813	GLENDINNING TCE	GLENDINNING TCE PRIMARY;STOW LINE	16.10	0	0.65	15.45	2016 ED1
SP11214	LOANING	LOANING PRIMARY;L902 LOWICK CENTRE/3784/1	46.15	0	16.60	29.56	2017 ED1
SP11814	NORHAM	NORHAM PRIMARY;CHIRNSIDE INTERCONNECTOR	18.23	0	9.93	8.30	2017 ED1
SP11114	COLDSTREAM	COLDSTREAM PRIMARY;DUKE STREET	21.30	16.83	4.47	0.00	2017 ED1
SP10623	OAKFIELD	OAKFIELD PRIMARY;EDNAM ROAD SUBSTATION	31.78	3.95	4.81	23.02	2017 ED1
SP13212	EARLSTON	EARLSTON PRIMARY;EAST END	20.30	9.05	0.95	10.30	2017 ED1
SP11914	HORNCLIFFE	HORNCLIFFE PRIMARY;L556 ABSW	30.00	7.16	8.11	14.73	2018 ED1
SP11222	LOANING	LOANING PRIMARY;L588 ABSW	36.51	4.90	22.99	8.62	2018 ED1
SP11614	MOREBATTLE	MOREBATTLE PRIMARY;L456 ABSW/3864/1	49.29	3.31	11.07	34.91	2018 ED1
SP12512	DENHOLM	DENHOLM PRIMARY;DENHOLM HILL TEE TOWERBURN	65.19	15.83	16.06	33.30	2019 ED1
SP10612	OAKFIELD	OAKFIELD PRIMARY;GOLF COURSE SITE	42.21	3.96	8.75	29.50	2019 ED1
SP11812	Interconnected HV Circuit, For details see Master Circuit - SP11213	NORHAM PRIMARY;A/B L0598	12.66	0	1.41	11.26	2019 ED1
SP12412	WHITCHESTER	WHITCHESTER PRIMARY;L507 ABSW	31.80	0	22.18	9.62	2020 ED1
SP13013	LAUDER	LAUDER PRIMARY;L1065 ABSW	35.15	17.12		18.03	2020 ED1
SP12212	GREENLAW	GREENLAW PRIMARY;DUNS ROAD	32.55	17.37	10.40	4.77	2020 ED1
SP11913	HORNCLIFFE	HORNCLIFFE PRIMARY;L596 ABSW	19.95	9.00	1.93	9.02	2020 ED1
SP12122	CHIRNSIDE	CHIRNSIDE PRIMARY;KIRKCARE/3932/1	13.12	0	4.00	9.12	2021 ED1
SP10912	GORDON	GORDON PRIMARY;GORDON VILLAGE	13.50	6.13	0.34	7.03	2021 ED1
SP11224	LOANING	LOANING PRIMARY;ROBERTS LODGE	0.48	0	0	0.48	2021 ED1
SP13222	EARLSTON	EARLSTON PRIMARY;L647 ABSW	24.17	7.79	2.56	13.82	2021 ED1
SP12413	WHITCHESTER	WHITCHESTER PRIMARY;L506 ABSW	25.65	6.20	5.71	13.74	2021 ED1
SP11111	COLDSTREAM	COLDSTREAM PRIMARY;L291 ABSW TEE L288 ABSW	16.85	0	1.59	15.26	2021 ED1
SP11813	NORHAM	NORHAM PRIMARY;GRINDON LINE	10.41	0.25	2.53	7.64	2021 ED1
SP11011	DEANS CLOSE	DEANS CLOSE PRIMARY;A/B L682/110/11/1	15.12	0	1.56	13.56	2021 ED1
SP10915	GORDON	GORDON PRIMARY;L668 ABSW	28.67	0	9.07	19.60	2021 ED1
SP12414	WHITCHESTER	WHITCHESTER PRIMARY;L233 ABSW	22.46	6.59	15.87	0.00	2021 ED1
SP11713	YETHOLM	YETHOLM PRIMARY;YETHOLM SWITCHING STATION	31.70	6.50	6.29	18.91	2022 ED1
SP12022	AYTON	AYTON PRIMARY;AYTON AUX RMU/ 120/22/2	1.34	1.34	0	0.00	2022 ED1
SP10913	GORDON	GORDON PRIMARY;L516 ABSW	11.10	5.30	3.83	1.97	2022 ED1
SP11324	NORTH ROAD	NORTH ROAD PRIMARY; CB UNMATCHED	21.40	11.31	8.02	2.06	2022 ED1
SP12123	CHIRNSIDE	CHIRNSIDE PRIMARY;DEXTERS No2/3933/1	2.46	2.46	0	0.00	2022 ED1
SP12113	CHIRNSIDE	CHIRNSIDE PRIMARY;DEXTERS NO 1 TEE L524 ABSW	1.95	0	0	1.95	2022 ED1
SP12313	NEWCASTLETON	NEWCASTLETON PRIMARY;NEWCASTLETON O/H LINE	57.36	0	43.50	13.87	2015 ED1
SP12712	INNERLEITHEN	INNERLEITHEN PRIMARY;STATION SAWMILL	16.36	0.94	5.69	9.73	2016 ED1
SP12723	INNERLEITHEN	INNERLEITHEN PRIMARY;PIRNS TEED TRAQUAIR	16.25	0	0	16.25	2020 ED1

Non-Load Related Primary Projects

Primary Name	Asset Type	Job Type	Number
DENHOLM PRIMARY	Switchgear	Replacement	1
EARLSTON PRIMARY	Transformer	Replacement	2
GLENDINNING TCE PRIMARY	Transformer	Replacement	2
GYTES PRIMARY	Transformer	Refurbishment	2
HAWICK GRID	Switchgear	Replacement	1
HORNCLIFFE PRIMARY	Transformer	Refurbishment	1
	Switchgear	Retrofit	3
INNERLEITHEN PRIMARY	Transformer	Replacement	1
	Switchgear	Replacement	1
KINGSLAND PRIMARY	Transformer	Refurbishment	1
NORHAM PRIMARY	Switchgear	Retrofit	1
OAKFIELD PRIMARY	Switchgear	Retrofit	1
YAIR BRIDGE PRIMARY	Switchgear	Replacement	1

Load Related Primary Projects

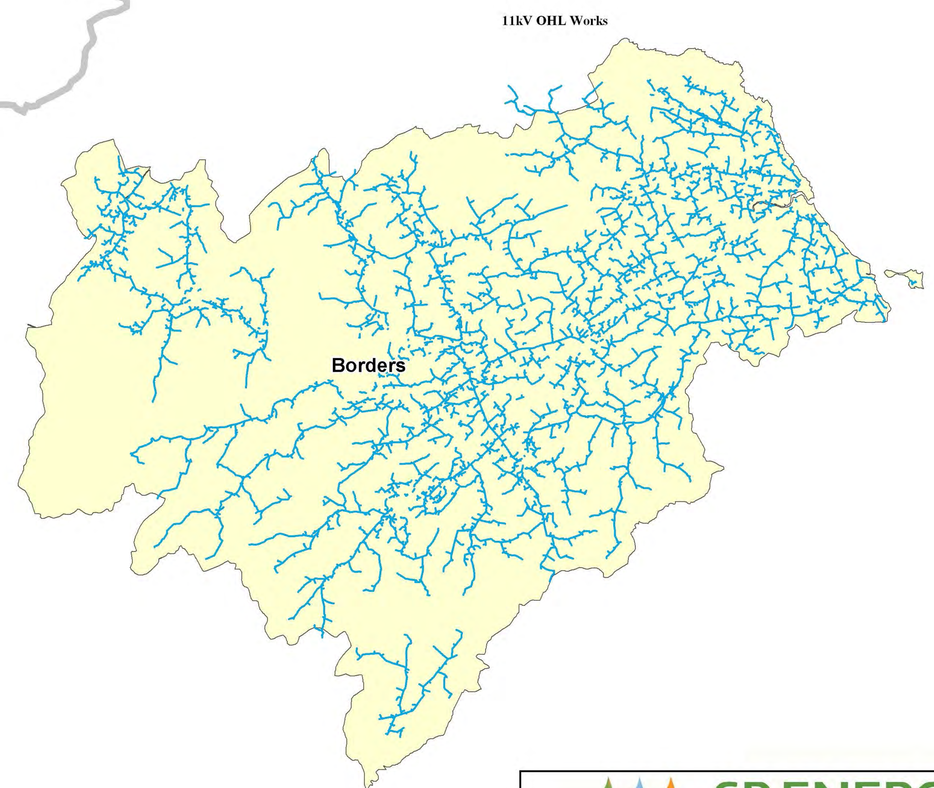
Project Title	Substation Name	Asset Type	Job Type	Number
Berwick (North Road/Loaning Relief) Reinforcement	North Road/The Loaning Primarys	Primary Substation	Reinforcement	1
Berwick Ring Voltage Support	Chirnside Primary	Voltage Control Device	Fault Level	1
Chirnside Reinforcement	Chirnside Primary	Transformer	Reinforcement	2
Deans Close Reinforcement	Deans Close Primary	Transformer	Reinforcement	2
Duns Reinforcement	Duns Primary	Transformer	Reinforcement	2
Norham GSP (Berwick_Eccles) 33kV Network Integration	Norham GSP	GSP	Reinforcement	1
North Road 11kV Fault Level Resolution	North Road Primary	Switchboard	Fault Level	1
Oakfield (Kelso) Reinforcement	Oakfield Primary	Transformer	Reinforcement	2
Yair Bridge 22kV Voltage Uprating	Walkerburn Primary	Primary Substation	Reinforcement	1
	Innerleithen Primary	Primary Substation	Reinforcement	1



33kV OHL Works

Circuit Ref No.	Primary Substation	Circuit Name	OHL Length (km)	Total Poles	Rebuild (km)	Refurbishment (km)	Job Type	Production Year
SP14711	Eccles GSP		7.68	89	7.68		Rebuild	2020
SP10711	YAIR BRIDGE		1.98	22	1.98	0.00	Rebuild	2018
SP10325	Galashiels GSP	GALASHIELS GRID ; LAUDER/ DUN LAW WINDFARM	27.75	346	0.00	27.75	Refurbishment	2019
SP10322	Galashiels GSP	GALASHIELS GRID ; YAIR BRIDGE/ SELKIRK N	6.71	72	0.00	6.71	Refurbishment	2020
SP10314	Galashiels GSP	GALASHIELS GRID ; HAWICK TEE ST BOSWELLS	10.52	119	10.52	0.00	Rebuild	2021
SP10312	Galashiels GSP	GALASHIELS GRID ; YAIR BRIDGE/ SELKIRK N	6.70	72	0.00	6.70	Refurbishment	2020
SP10222	Hawick GSP	HAWICK GRID ; DENH / DECL 2	15.97	212		15.97	Refurbishment	2022
SP10214	Hawick GSP	HAWICK GRID ; ST BOSWELLS /GALASHIELS	16.51	193		16.51	Refurbishment	2022
SP10213	Hawick GSP	HAWICK GRID ; COMMERCIAL RD 1	0.82	14	0.82		Rebuild	2015
SP10212	Hawick GSP	HAWICK GRID ; DENH/DECL 1 /MORE	31.21	506	0.00	31.21	Refurbishment	2015
SP10123	Eccles GSP	ECCLES GRID ; OAKFIELD NO.2	9.32	109	9.32	0.00	Rebuild	2019
SP10122	Eccles GSP	ECCLES: DUNS	12.46	61		12.46	Refurbishment	2021
SP10115	Eccles GSP		0.32	5	0.32		Rebuild	2015
SP10114	Eccles GSP	ECCLES GRID ; EARLSTON	42.62	545	42.62	0.00	Rebuild	2019
SP10112	Eccles GSP	ECCLES GRID ; OAKFIELD T1	8.69	115	0.00	8.69	Refurbishment	2020
SP10023	Berwick GSP	BERWICK GSP ; NORHAM TEE HORNCLIFFE	18.06	215	0.00	18.06	Refurbishment	2021
SP10022	Berwick GSP	BERWICK GSP: LOANING/ NORTH ROAD	8.53	105	8.53		Rebuild	2017
SP10013	Berwick GSP	EYEMOUTH; DUNS	16.50	212	16.50		Rebuild	2015
SP10012	Berwick GSP	BERWICK GSP ; NORO / LONI 1	8.23	105	8.23		Rebuild	2015

11kV OHL Works



SP ENERGY NETWORKS

RIIO ED1 ZONE MAPPING

OPERATIONAL ZONE - GEOGRAPHICAL LAYOUT

BORDERS

33kV DISTRIBUTION NETWORK

VERSION 2
19/06/2013

CREATED BY: ANTHONY DONOGHUE
MODIFIED BY:BRENDAN GALLOWAY

11kV OHL Works

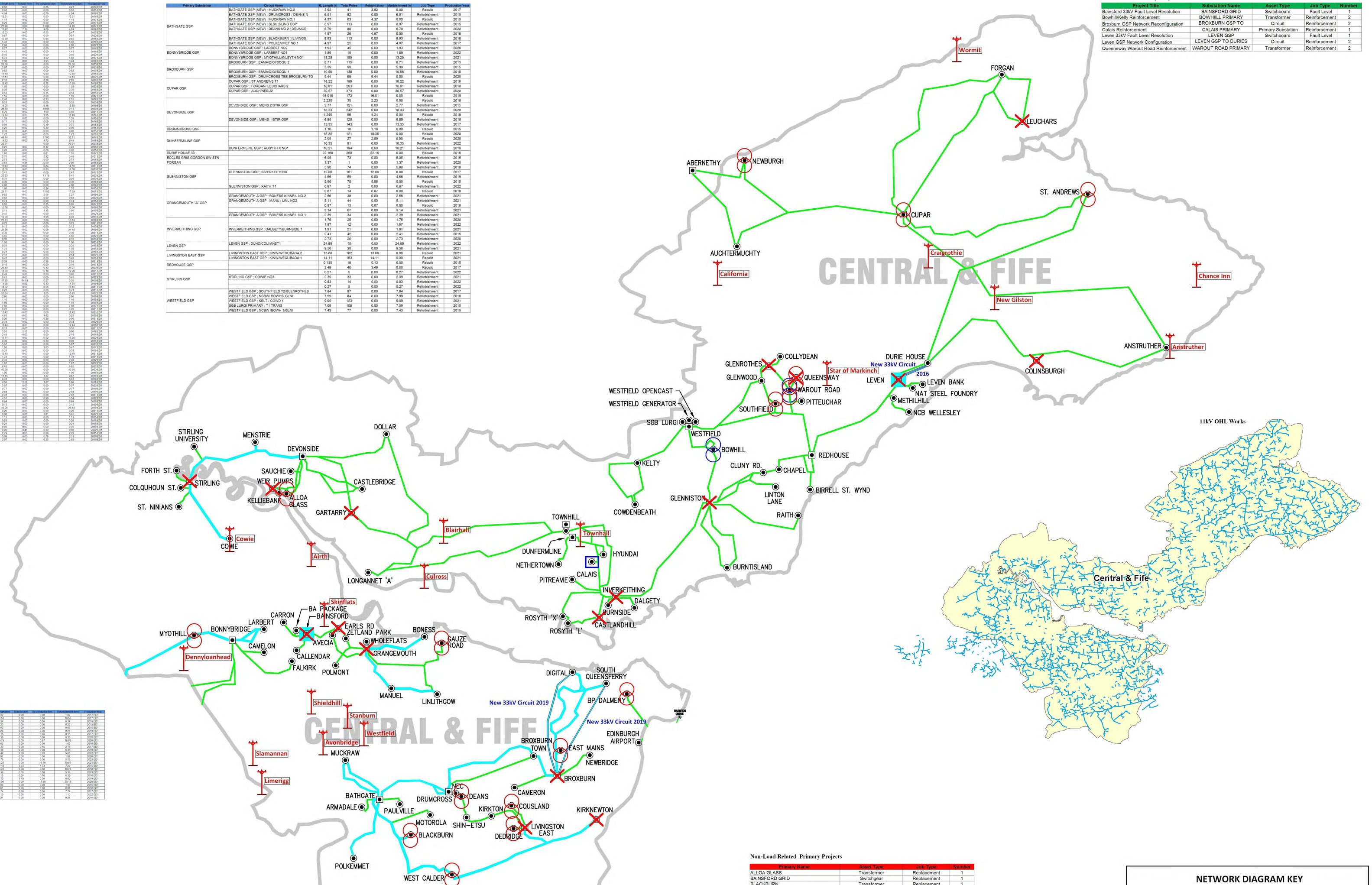
Primary Substation	Circuit Name	% Length (km)	Total Poles	Rebuild (km)	Refurbishment (km)	Job Type	Production Year
ARBIRLAW	ARBIRLAW ; BIRCH ROAD EAST	0.05	0.00	0.05	0.00	Rebuild	2017/2018
ARBIRLAW	ARBIRLAW ; THE BROCKSBU 364/12	0.63	0.00	0.00	0.63	Refurbishment	2017/2018
ARBIRLAW	ARBIRLAW ; ULPHASTO ENGINEERING 364/13	0.03	0.00	0.00	0.03	Refurbishment	2017/2018
ARBIRLAW	ARBIRLAW ; ULPHASTO ENGINEERING 364/13	0.03	0.00	0.00	0.03	Refurbishment	2017/2018
ARBIRLAW	ARBIRLAW ; WINCHINGDE SCHOOL 364/22	1.41	0.00	0.00	1.41	Refurbishment	2017/2018
AUCHTERMUCHTY	AUCHTERMUCHTY PRIMARY ; BALMUNG 364/10	0.00	0.00	0.00	0.00	Refurbishment	2017/2018
AUCHTERMUCHTY	AUCHTERMUCHTY PRIMARY ; TAYLORS TWEEDMILL 364/11	0.00	0.00	0.00	0.00	Refurbishment	2017/2018
AUCHTERMUCHTY	AUCHTERMUCHTY PRIMARY ; WEDDELLS AIR TEED ;AMACA K/B NO2	10.42	7.10	4.69	4.24	Rebuild	2020/2021
AUCHTERMUCHTY	AUCHTERMUCHTY PRIMARY ; WINDELANDS 4/93	0.03	0.00	0.03	0.00	Rebuild	2020/2021
BALMORE BYELAGE	BALMORE BYELAGE ; BALMORE ; CONGLOURHALT	0.00	0.00	0.00	0.00	Rebuild	2020/2021
BALMORE BYELAGE	BALMORE BYELAGE ; BALMORE ; CONGLOURHALT	0.78	0.00	0.00	0.00	Rebuild	2020/2021
BALMORE BYELAGE	BALMORE BYELAGE ; BALMORE FARM	1.80	0.00	0.00	1.80	Refurbishment	2017/2018
BALMORE BYELAGE	BALMORE BYELAGE ; CADDEE	2.66	0.00	0.00	2.66	Refurbishment	2017/2018
BALMORE BYELAGE	BALMORE BYELAGE ; MOSSIDE FM A/B	0.00	0.00	0.00	0.00	Rebuild	2020/2021
BLACKBURN	BLACKBURN ; ACCESS ROAD	4.41	0.00	0.00	4.41	Refurbishment	2017/2018
BLACKBURN	BLACKBURN ; TRANSFORMER NO 1	0.40	0.00	0.00	0.40	Rebuild	2021/2022
BOWHILL	BOWHILL PRIMARY ; ASPYLAIRS ROAD EXERCISED NETWORK 010/11	13.25	0.00	0.00	13.25	Refurbishment	2021/2022
BOWHILL	BOWHILL PRIMARY ; HOPTHRO 364/21	0.73	0.00	0.00	0.73	Refurbishment	2017/2018
BOWHILL	BOWHILL PRIMARY ;KIDDIEMAN SCHOOL	21.06	0.00	0.00	21.06	Refurbishment	2017/2018
BOWHILL S BOSWELL	BOWHILL PRIMARY ;S BOSWELL AVENUE	2.97	0.00	0.00	2.97	Refurbishment	2017/2018
BROXBURN	BROXBURN ;GOSSIEVILLAGE	0.82	0.00	0.00	0.82	Rebuild	2021/2022
BROXBURN	BROXBURN ; LOCAL 11	0.00	0.00	0.00	0.00	Rebuild	2021/2022
BROXBURN	BROXBURN ;MELROSE A/B TEED WYNDFORD A/B	17.13	0.00	0.00	17.13	Rebuild	2020/2021
BURNSIDE	BURNSIDE PRIMARY BURNSIDE LOCAL	2.33	0.00	0.28	2.33	Rebuild	2020/2021
BURNTISLAND	BURNTISLAND ; PRIMARY DUNNS EAST END	0.00	0.00	0.00	0.00	Rebuild	2020/2021
CAMELON	CAMELON ; PRIMARY BANKNOCK ; CRAIGHELLY	0.00	0.00	0.00	0.00	Rebuild	2020/2021
CAMERON BRIG	CAMERON BRIG ;CAMERON PHOENIX SUB STN	0.39	0.00	0.00	0.39	Rebuild	2020/2021
CASTLANDHILL	CASTLANDHILL PRIMARY ; CHURCHILL PLACE	0.53	0.00	0.00	0.53	Rebuild	2020/2021
CASTLANDHILL	CASTLANDHILL PRIMARY ;CASTLANDHILL TKT	1.78	0.00	0.00	1.78	Refurbishment	2017/2018
CLACKMANNAN	CLACKMANNAN PRIMARY ; CLACKMANNAN	0.00	0.00	0.00	0.00	Rebuild	2020/2021
CLAY SCHOOL	CLAY SCHOOL PRIMARY ; CLAY SCHOOL LOCAL	2.33	0.00	0.00	2.33	Rebuild	2017/2018
COLDSBURGH	COLDSBURGH PRIMARY ; BURGH MILLSORGHAM A/B/S	10.03	0.00	0.19	10.88	Rebuild	2020/2021
COLDSBURGH	COLDSBURGH PRIMARY ; LOCAL 11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
COLINSBURGH	COLINSBURGH PRIMARY ;ACHMORE DRIVE	8.99	0.00	1.66	4.60	Rebuild	2020/2021
COLLYDEAN	COLLYDEAN PRIMARY ;COLLYDEAN	19.64	0.00	0.35	10.48	Rebuild	2020/2021
COWDENBEATH AND LUMPHINGTON	COWDENBEATH AND LUMPHINGTON ;NURSING HOME K2/S11	1.76	0.00	0.00	1.76	Refurbishment	2017/2018
COWDENBEATH AND LUMPHINGTON	COWDENBEATH AND LUMPHINGTON ;TWELMEARNS 1/7/94/11	0.71	0.00	0.00	0.71	Refurbishment	2017/2018
CROOK OF DEVON	CROOK OF DEVON PRIMARY ;CROOK OF DEVON	0.00	0.00	0.00	0.00	Rebuild	2020/2021
CRUMMOCKBUTTS	CRUMMOCKBUTTS PRIMARY ;HILL LOCH	2.20	0.00	0.00	2.20	Rebuild	2015/2016
CUNINGHEARTH	CUNINGHEARTH PRIMARY ;STEMHOUSE STREET	0.33	0.00	0.00	0.00	Rebuild	2020/2021
CUPAR	CUPAR PRIMARY ;CUPAR LOCAL 11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
CUPAR	CUPAR PRIMARY ;LARGO / MIRETHAN PARK	49.14	0.00	32.73	16.41	Rebuild	2020/2021
CUPAR	CUPAR PRIMARY ;WESTFIELD AVENUE	14.22	0.00	0.00	6.49	Rebuild	2015/2016
CUPAR	CUPAR PRIMARY ;WORKS	20.21	0.00	0.00	20.21	Rebuild	2020/2021
DALGETY ST ANDREWS	DALGETY ST ANDREWS ;LOCAL	0.00	0.00	0.00	0.00	Rebuild	2020/2021
DALGETY	DALGETY PRIMARY ;MARCONI SIMULATION	0.28	0.00	0.28	0.00	Rebuild	2020/2021
DALGETY	DALGETY PRIMARY ;SEE CH 1/4/7	1.66	0.00	0.00	1.66	Rebuild	2020/2021
DALGETY	DALGETY PRIMARY ;TEXACO	2.70	0.00	0.00	2.70	Rebuild	2020/2021
DOLLAR	DOLLAR ;LOCAL 11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
DOLLAR	DOLLAR ;LOCH A/B	2.62	0.00	0.00	2.62	Rebuild	2020/2021
DOLLAR	DOLLAR ;SHEARDALE A/B	15.43	0.00	0.64	14.59	Rebuild	2020/2021
DOLLAR	DOLLAR ;WOOD OF DOLLAR A/B	0.00	0.00	0.00	0.00	Rebuild	2020/2021
DURIE HOUSE	DURIE HOUSE ;PRIMARY K1/2/3/4/5/6/7/8/9/10 FUIRE FARM 161/312	12.06	0.00	12.06	0.00	Rebuild	2017/2018
DURIE HOUSE	DURIE HOUSE ;PRIMARY ETHAM FARM ABSW 181/282	22.23	0.00	17.78	4.45	Rebuild	2021/2022
EARLSHALL	EARLSHALL ;LOCAL 11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
EAST MAINS BROXBURN	EAST MAINS BROXBURN ;FURNACE TREATMENTS (OLD)	0.36	0.00	0.00	0.36	Refurbishment	2017/2018
EAST MAINS BROXBURN	EAST MAINS BROXBURN ;LOCAL 11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
EDRADOUR	EDRADOUR PRIMARY ;DAIRYHOUSE BANK	1.99	0.00	0.00	1.99	Refurbishment	2017/2018
FORGAN	FORGAN PRIMARY ;FOALSTLEE/DUSTN	29.51	0.00	13.82	13.69	Rebuild	2017/2018
FORGAN	FORGAN PRIMARY ;LOCAL 11 KV CENTRE	0.00	0.00	0.00	0.00	Rebuild	2020/2021
GARLOCH	GARLOCH PRIMARY ;LOCAL 11	2.61	0.00	0.00	2.61	Rebuild	2020/2021
GARTARRY	GARTARRY ST. ULSE/SHERIFF VILLAGE	0.74	0.00	0.00	0.74	Refurbishment	2017/2018
GARTARRY	GARTARRY ;COLLYDEAN/TOL	0.00	0.00	0.00	0.00	Rebuild	2020/2021
GARTARRY	GARTARRY ;CUNNOR No 1	10.04	0.00	0.00	10.04	Refurbishment	2017/2018
GARTARRY	GARTARRY ;CUNNOR No 2	0.00	0.00	0.00	0.00	Rebuild	2020/2021
GARTARRY	GARTARRY ;CUNNOR No 3	3.45	0.00	0.00	3.45	Rebuild	2020/2021
GAUZE ROAD	GAUZE ROAD BONESS ACADEMY	10.59	0.00	0.00	2.64	Rebuild	2015/2016
GAUZE ROAD	GAUZE ROAD BONESS ;GAUZE ROAD LOCAL	0.00	0.00	0.00	0.00	Rebuild	2020/2021
GLENROTHES	GLENROTHES PRIMARY ;GLENROTHES SCHOOL	0.73	0.00	0.00	0.73	Rebuild	2020/2021
GLENWOOD (LAIRDOT ROAD)	GLENWOOD PRIMARY ;WASHALL SCHOOL ? BAIRNTON PLACE	0.12	0.00	0.00	0.12	Refurbishment	2017/2018
GREENDYKE ALLOA	GREENDYKE ALLOA PRIMARY ;LOCAL 11	21.06	0.00	0.00	21.06	Rebuild	2020/2021
GREENDYKE ALLOA	GREENDYKE ALLOA PRIMARY ;TEXACO	6.28	0.00	0.00	6.28	Rebuild	2020/2021
GREENDYKE ALLOA	GREENDYKE ALLOA PRIMARY ;TOWNHILL	4.00	0.00	0.00	4.00	Rebuild	2020/2021
HAWKHILL (Also shown on sheet 2)	HAWKHILL PRIMARY ;TRANSFORMER 1 SECTIONS 2/3 STATION 159/222	3.53	0.00	0.00	3.53	Rebuild	2020/2021
KELLIEBANK ALLOA	KELLIEBANK ALLOA PRIMARY ;LOCAL 11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
KELLIEBANK ALLOA	KELLIEBANK ALLOA PRIMARY ;LOCAL 11 KV	0.00	0.00	0.00	0.00	Rebuild	2020/2021
KELLIEBANK ALLOA	KELLIEBANK ALLOA PRIMARY ;LOCAL 11KV	0.00	0.00	0.00	0.00	Rebuild	2020/2021
KELLIEBANK ALLOA	KELLIEBANK ALLOA ;CHEMIE 1MW	0.73	0.00	0.00	0.73	Rebuild	2015/2016
KELLIEBANK ALLOA	KELLIEBANK ALLOA ;GLASS RECYCLING 2015/1	0.00	0.00	0.00	0.00	Rebuild	2020/2021
KELTY	KELTY PRIMARY ;CAIRNEYHILL ;SEE CH 1/4/7	0.00	0.00	0.00	0.00	Rebuild	2020/2021
KELTY	KELTY PRIMARY ;CASTLEMAIN	2.50	0.00	0.56	2.50	Rebuild	2015/2016
KILCREW	KILCREW ;LOCAL 11 KV	0.00	0.00	0.00	0.00	Rebuild	2020/2021
KILSYTH	KILSYTH BANTON ROAD A/B TEED SMAWENO HOUSE A/B	21.40	0.00	0.13	21.27	Rebuild	2020/2021
KILSYTH	KILSYTH PRIMARY ;LOCAL 11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
KILSYTH	KILSYTH PRIMARY ;TOWNHILL	3.85	0.00	0.00	3.85	Rebuild	2020/2021
KILSYTH	KILSYTH ;LAIRDSWALL CALL CENTRE	0.45	0.00	0.00	0.45	Rebuild	2020/2021
KIRKNEWTON	KIRKNEWTON ;LOCAL 11	21.06	0.00	0.00	21.06	Rebuild	2020/2021
KIRKNEWTON	KIRKNEWTON ;PRIMARY	11.52	0.00	0.43	11.09	Rebuild	2020/2021
KIRKNEWTON	KIRKNEWTON ;TO LIMMO CHEC	14.03	0.00	0.54	13.49	Rebuild	2020/2021
KIRKNEWTON	KIRKNEWTON ;TO LIMMO CHEC	0.71	0.00	0.00	0.71	Rebuild	2020/2021
KIRKNEWTON	KIRKNEWTON ;TO LIMMO CHEC	16.24	0.00	0.00	16.24	Rebuild	2020/2021
LAIRDOT	LAIRDOT ;CAIRNEYHILL 1/7/94/11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
LAIRDOT	LAIRDOT ;CAIRNEYHILL 2	1.18	0.00	0.00	1.18	Rebuild	2020/2021
LAIRDOT	LAIRDOT ;CAIRNEYHILL 3	1.50	0.00	0.00	1.50	Rebuild	2020/2021
LAIRDOT	LAIRDOT ;CAIRNEYHILL PARK NORTH	0.00	0.00	0.00	0.00	Rebuild	2020/2021
LAIRDOT	LAIRDOT ;LOCAL 11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
LAIRDOT	LAIRDOT ;TO MILLSIDE	11.42	0.00	0.00	11.42	Rebuild	2020/2021
LEVENMEE	LEVENMEE PRIMARY ;LEVENMEE LOCAL	2.63	0.00	0.00	2.63	Rebuild	2020/2021
LEVENMEE	LEVENMEE PRIMARY ;LEVENMEE LOCAL 11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
LEVENMEE	LEVENMEE PRIMARY ;LEVENMEE TO SITE ;TEMP SUPPLIES	0.00	0.00	0.00	0.00	Rebuild	2020/2021
LINLITHGOW	LINLITHGOW ;TO CLAREMOON DEDICATED	12.43	0.00	0.00	12.43	Rebuild	2020/2021
LINLITHGOW	LINLITHGOW ;TO STEPPS	0.16	0.00	0.00	0.16	Rebuild	2020/2021
LOCHGELLY	LOCHGELLY PRIMARY ;LOCAL 11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
MANUEL	MANUEL BANK ;HARDENS ;T.ERLITHGOW BRIDGE ABSW 925/12	2.46	0.00	0.00	2.46	Rebuild	2020/2021
MANUEL	MANUEL BRIDGEHEAD ;ABSW TBC 925/222	15.73	0.00	0.53	15.20	Rebuild	2020/2021
MAYBOLE	MAYBOLE ;LOCAL 11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
METHILHILL	METHILHILL PRIMARY ;METHILHILL BRIDGE ABSW/0924/1	2.62	0.00	0.00	2.62	Rebuild	2020/2021
METHILHILL	METHILHILL PRIMARY ;SHADYSIDE SW STN	1.50	0.00	0.03	1.47	Rebuild	2020/2021
METHILHILL	METHILHILL PRIMARY ;STATION ROAD ;STATION ROAD	3.71	0.00	0.00	3.71	Rebuild	2020/2021
MUCKRAH	MUCKRAH ;HAREBURN AVENUE ABSW/0941/11	12.10	0.00	0.00	12.10	Rebuild	2020/2021
MUCKRAH	MUCKRAH ;HAREBURN AVENUE ABSW/0941/11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
MUCKRAH	MUCKRAH ;TEED WINKFIELD BRIDGE ABSW/0942/23	2.62	0.00	0.00	2.62	Rebuild	2020/2021
MUCKRAH	MUCKRAH ;TO WISEMAN PUMPING STN/0941/11	1.87	0.00	0.00	1.87	Rebuild	2020/2021
MUCKRAH	MUCKRAH ;TO WISEMAN PUMPING STN/0941/11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
MUCKRAH	MUCKRAH PRIMARY ;LOCAL 11KV	0.00	0.00	0.00	0.00	Rebuild	2020/2021
MYOTHILL	MYOTHILL PRIMARY ;HOOLWAY WAY	1.00	0.00	0.00	1.00	Rebuild	2020/2021
MYOTHILL	MYOTHILL PRIMARY ;MAXTON ROAD	11.10	0.00	0.00	11.10	Rebuild	2020/2021
MYOTHILL	MYOTHILL PRIMARY ;SLAID HILL CRESCENT	5.43	0.00	0.00	5.43	Rebuild	2020/2021
MYOTHILL	MYOTHILL PRIMARY ;TEXACO	0.00	0.00	0.00	0.00	Rebuild	2020/2021
NEWBRIDGE	NEWBRIDGE PRIMARY ;NEWBRIDGE VILLEVERE	1.07	0.00	0.00	1.07	Rebuild	2020/2021
NEWBRIDGE	NEWBRIDGE ;NEW GLASS GLOVER 39/02	0.77	0.00	0.00	0.77	Rebuild	2015/2016
NEWBRIDGE	NEWBRIDGE ;NEWBRIDGE INDUSTRIAL 28/12	0.00	0.00	0.00	0.00	Rebuild	2020/2021
NEWBRIDGE	NEWBRIDGE ;NEWBRIDGE INDUSTRIAL ;SEE 28/12	2.43	0.00	0.00	2.43	Rebuild	2020/2021
NEWBRIDGE	NEWBRIDGE ;NEWBRIDGE INDUSTRIAL A/B 28/21	4.53	0.00	0.99	3.54	Rebuild	2020/2021
NEWBRIDGE (LG BRUNSBRI)	NEWBRIDGE ;NEWBRIDGE SW GROUND ;28/11	6.64	0.00	0.00	6.64	Rebuild	2020/2021
NEWBURGH	NEWBURGH PRIMARY ;CAIRNEYHILL 1/7/94/11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
NEWBURGH	NEWBURGH PRIMARY ;CRAIGIE HILL 1/7/94/11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
NEWBURGH	NEWBURGH PRIMARY ;NEWBURGH ;SEE 1/7 FOOT OF GARDENS 181/221	2.64	0.00	0.00	2.64	Rebuild	2020/2021
NEWBURGH	NEWBURGH PRIMARY ;LAIRDSWALL 364/21	0.06	0.00	0.01	0.05	Rebuild	2020/2021
OLD BRIG	OLD BRIG ;LOCAL 11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
OLD BRIG	OLD BRIG ;THE WINDINGS	0.00	0.00	0.00	0.00	Rebuild	2020/2021
OLD BRIG	OLD BRIG ;TO LIMMOHAUGH/3/3/1	0.43	0.00	0.00	0.43	Rebuild	2020/2021
OLD BRIG	OLD BRIG ;TO LIMMOHAUGH/3/3/2	0.00	0.00	0.00	0.00	Rebuild	2020/2021
PAULVILLE	PAULVILLE ;PRIMARY ;LOCAL 11	0.00	0.00	0.00	0.00	Rebuild	2020/2021
PAULVILLE	PAULVILLE ;MINERAL A/B 157/2	6.79	0.00	0.00	6.79	Rebuild	2015/2016
PITREAVIE	PITREAVIE ;PRIMARY ;CB UNMATCHED	0.09	0.00	0.00	0.09	Rebuild	2020/2021
PITTEUCHAR	PITTEUCHAR PRIMARY ;MINES DRIVE 190/242	3.97	0.00	0.00	0.25	Rebuild	2015/2016

33kV OHL Works

Primary Substation	Circuit Name	% Length (km)	Total Poles	Rebuild (km)	Refurbishment (km)	Job Type	Production Year
BATHGATE GSP	BATHGATE GSP (NEW) ; MUCKRAH NO 2	3.92	41	3.92	0.00	Rebuild	2017
	BATHGATE GSP (NEW) ; DRUMCROSS / DEANS N	6.51	82	0.00	6.51	Refurbishment	2017
	BATHGATE GSP (NEW) ; MUCKRAH NO 1	4.37	63	4.37	0.00	Rebuild	2015
	BATHGATE GSP (NEW) ; BLBU 21/NG GSP	8.97	113	0.00	8.97	Refurbishment	2015
	BATHGATE GSP (NEW) ; DEANS NO 2 / DRUMGR	6.79	88	0.00	6.79	Refurbishment	2022
		4.97	26	4.97	0.00	Rebuild	2018
	BATHGATE GSP (NEW) ; BLACKBURN 1/LIVINGS	8.93	113	0.00	8.93	Refurbishment	2018
	BATHGATE GSP (NEW) ; POLKEMMET NO.1	4.97	25	0.00	4.97	Refurbishment	2017
BONNYBRIDGE GSP	BONNYBRIDGE GSP ; LARBERT NO2	1.93	45	0.00	1.93	Refurbishment	2020
	BONNYBRIDGE GSP ; LARBERT NO1	1.89	15	0.00	1.89	Refurbishment	2022
	BONNYBRIDGE GSP ; MYOTHILL/KILBYTH NO1	13.25	185	0.00	13.25	Refurbishment	2021
BROXBURN GSP	BROXBURN GSP ; EAMA/OXI/SOQU 2	8.71	115	0.00	8.71	Refurbishment	2015
		5.39	90	0.00	5.39	Refurbishment	2015
	BROXBURN GSP ; EAMA/OXI/SOQU 1	10.56	138	0.00	10.56	Refurbishment	2015
	BROXBURN GSP ; DRUMCROSS TEE BROXBURN TO	9.44	68	9.44	0.00	Rebuild	2020
CUPAR GSP	CUPAR GSP ; ST ANDREWS T1	18.22	199	0.00	18.22	Refurbishment	2018
	CUPAR GSP ; FORGAN /LEUCHARS 2	18.01	203	0.00	18.01	Refurbishment	2018
	CUPAR GSP ; AUCHTNEBU2	30.57	373	0.00	30.57	Refurbishment	2020
DEVONSIDE GSP		16.010	173	16.01	0.00	Rebuild	2015
	DEVONSIDE GSP ; MENS 2/STIR GSP	2.230	30	2.23	0.00	Rebuild	2018
		2.77	121	0.00	2.77	Refurbishment	2015
		18.33	242	0.00	18.33	Refurbishment	2020
		4.240	56	4.24	0.00	Rebuild	2018
	DEVONSIDE GSP ; MENS 1/STIR GSP	6.89	125	0.00	6.89	Refurbishment	2015
		13.35	143	0.00	13.35	Refurbishment	2017
DRUMMCROSS GSP		1.18	10	1.18	0.00	Rebuild	2015
DUMFERMLINE GSP		18.35	121	18.35	0.00	Rebuild	2020
		2.09	27	2.09	0.00	Rebuild	2020
		10.35	91	0.00	10.35	Refurbishment	2022
	DUNFERMLINE GSP ; ROSYTH X NO1	10.21	194	0.00	10.21	Refurbishment	2018
DURIE HOUSE 33		22.160	260	22.16	0.00	Rebuild	2016
ECCLES GRID GORDON SW STN		6.05	73	0.00	6.05	Refurbishment	2015
FORGAN		1.37	1	0.00	1.37	Refurbishment	2020
GLENNISTON GSP	GLENNISTON GSP ; INVERKEITHING	12.06	161	12.06	0.00	Rebuild	2017
		4.66	59	0.00	4.66	Refurbishment	2019
		5.96	75	5.96	0.00	Rebuild	2015
	GLENNISTON GSP ; RAITH T1	6.87	2	0.00	6.87	Refurbishment	2022
GRANGEMOUTH "A" GSP		0.87	14	0.87	0.00	Rebuild	2018
	GRANGEMOUTH A GSP ; BONESS KINNEIL NO 2	2.56	38	0.00	2.56	Refurbishment	2021
	GRANGEMOUTH A GSP ; MANU / LINL NO2	5.11	44	0.00	5.11	Refurbishment	2021
		0.87	13	0.87	0.00	Rebuild	2018
	GRANGEMOUTH A GSP ; BONESS KINNEIL NO.1	3.14	67	0.00	3.14	Refurbishment	2021
		2.39	34	0.00	2.39	Refurbishment	2021
INVERKEITHING GSP		1.76	25	0.00	1.76	Refurbishment	2020
		1.97	12	0.00	1.97	Refurbishment	2022
	INVERKEITHING GSP ; DALGETY/BURNSIDE 1	1.91	21	0.00	1.91	Refurbishment	2021
		2.41	42	0.00	2.41	Refurbishment	2015
		2.73	20	0.00	2.73	Refurbishment	2020
LEVEN GSP	LEVEN GSP ; DUHO/COLI/ANST1	24.89	15	0.00	24.89	Refurbishment	2022
		9.56	30	0.00	9.56	Refurbishment	2021
LIVINGSTON EAST GSP	LIVINGSTON EAST GSP ; KINNIVIE/CLBAGA 2	13.68	162	13.68	0.00	Rebuild	2021
	LIVINGSTON EAST GSP ; KINNIVIE/CLBAGA 1	14.11	163	14.11	0.00	Rebuild	2021
REDHOUSE GSP		0.130	18	0.13	0.00	Rebuild	2015
		3.49	46	3.49	0.00	Rebuild	2017
STIRLING GSP	STIRLING GSP ; COWIE NO3	0.27	5	0.00	0.27	Refurbishment	2022
		2.39	33	0.00	2.39	Refurbishment	2021
		0.83	14	0.00	0.83	Refurbishment	2022
		0.27	5	0.00	0.27	Refurbishment	2022
WESTFIELD GSP	WESTFIELD GSP ; SOUTHFIELD T2/GLENROTHES	7.84	97	0.00	7.84	Refurbishment	2017
	WESTFIELD GSP ; NCBW/ BOWHD/ GLNI	7.99	84	0.00	7.99	Refurbishment	2016
	WESTFIELD GSP ; KELT / COWD 1	9.09	123	0.00	9.09	Refurbishment	2021
	SGB LURGI PRIMARY ; T1 TRANS	7.09	108	0.00	7.09	Refurbishment	2015
	WESTFIELD GSP ; NCBW /BOWH 1/GLNI	7.43	77	0.00	7.43	Refurbishment	2015

Load Related Primary Projects

Project Title	Substation Name	Asset Type	Job Type	Number
Bainsford 33kV Fault Level Resolution	BAINSFORD GRID	Switchboard	Fault Level	1
Bowhill/Kelty Reinforcement	BOWHILL PRIMARY	Transformer	Reinforcement	2
Broxburn GSP Network Reconfiguration	BROXBURN GSP TO	Circuit	Reinforcement	2
Calais Reinforcement	CALAIS PRIMARY	Primary Substation	Reinforcement	1
Leven 33kV Fault Level Resolution	LEVEN GSP	Switchboard	Fault Level	1
Leven GSP Network Configuration	LEVEN GSP TO DURIES	Circuit	Reinforcement	2
Queensway Warout Road Reinforcement	WAROUT ROAD PRIMARY	Transformer	Reinforcement	2



11kV OHL Works

| Primary Substation | Circuit Name | % Length (km) | Total Poles | Rebuild (km) | Refurbishment (km) | Job Type | Production Year |
|---|---|---|---|---

NETWORK DIAGRAM KEY

- Transformer (Load)
- Transformer (Non Load)
- Voltage Control Device (Load)
- Switchgear (Non Load)
- Voltage Support Device (Load)
- Primary Substation (Load)
- Switchboard (Load)
- Grid Supply Point (Load)
- 33kV OHL Refurbishment
- Village Modernisation
- 33kV Network (Existing)
- NCB Work Area

Non-Load Related Primary Projects

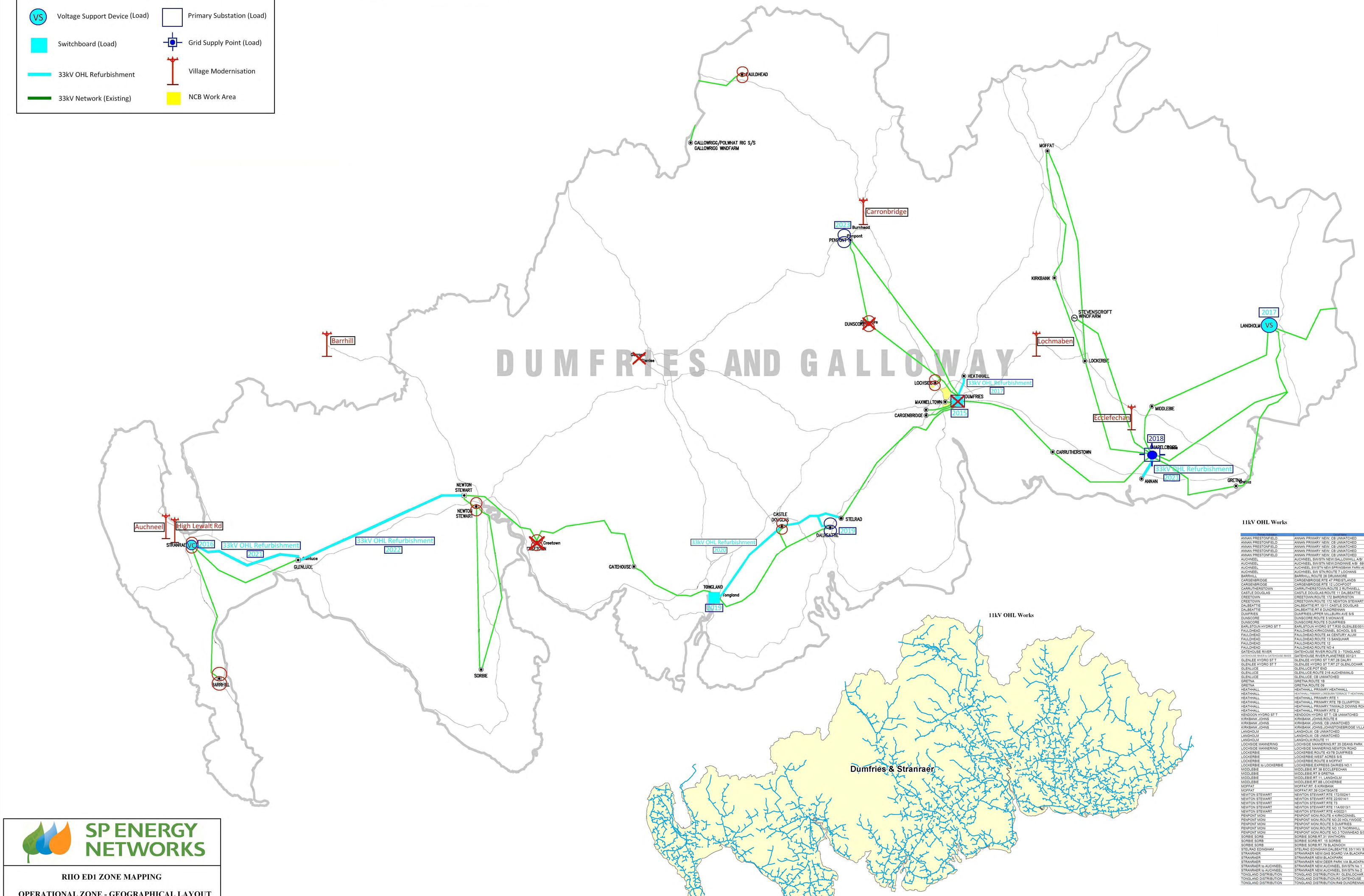
Primary Name	Asset Type	Job Type	Number
BARHILL	Transformer	Replacement	1
CASTLE DOUGLAS	Transformer	Replacement	2
	Switchgear	Replacement	1
CREETOWN	Transformer	Replacement	1
DUMFRIES GRID	Switchgear	Replacement	1
DUNSCORE	Switchgear	Replacement	1
	Transformer	Replacement	1
FAULDHEAD	Transformer	Replacement	2
GLENLEE HYDRO ST	Switchgear	Replacement	1
LOCHSIDE MANNERING	Transformer	Replacement	1
NEWTON STEWART	Transformer	Replacement	2
STRANRAER NEW	Transformer	Replacement	2

33kV OHL Works

Primary Substation	Circuit Name	OHL Length (km)	Total Poles	Rebuild (km)	Refurbishment	Job Type	Production Year
CHAPELCROSS GSP	CHAPELCROSS GSP : ANNAN 1	2.43	31	0.00	2.43	Refurbishment	2021
DUMFRIES GSP	HEATHHALL : CIRCUIT-TX2	0.73	9	0.00	0.73	Refurbishment	2017
GLENLUCE GSP	GLENLUCE GSP : RT6A STRANRAER 2	23.79	159	0.00	23.79	Refurbishment	2021
NEWTON STEWART GSP	NEWTON STEWART GSP : GLENLUCE	21.36	239	0.00	21.36	Refurbishment	2022
TONGLAND GSP		22.18	274	0.00	22.18	Refurbishment	2020

Load Related Primary Projects

Project Title	Substation Name	Asset Type	Job Type	Number
Dalbeattie Reinforcement	DALBEATTIE PRIMARY	Transformer	Reinforcement	2
Dumfries 132 / 11kV Fault Level Resolution	DUMFRIES GSP	Primary Substation	Fault Level	1
Dumfries 33kV Fault Level Resolution	DUMFRIES GSP	Switchboard	Fault Level	1
Ecclefechan Reinforcement	CHAPELCROSS GSP	GSP	Reinforcement	1
Langholm Primary Substation Voltage Reinforcement	LANGHOLM PRIMARY	Voltage Support Device	Reinforcement	1
Penpont Reinforcement	PENPONT PRIMARY	Transformer	Reinforcement	2
Stranraer Primary Substation Voltage Reinforcement	STRANRAER PRIMARY	Voltage Control Device	Reinforcement	1
Tongland 132 / 33kV GSP 33kV Network Integration	TONGLAND GSP	Switchboard	Reinforcement	1



11kV OHL Works

ANNAN PRESTONFIELD	ANNAN PRIMARY NEW; CB UNMATCHED	8.24	4.73	0.00	3.51	2015 ED1
ANNAN PRESTONFIELD	ANNAN PRIMARY NEW; CB UNMATCHED	26.54	0.00	0.00	26.54	2016 ED1
ANNAN PRESTONFIELD	ANNAN PRIMARY NEW; CB UNMATCHED	12.20	0.00	0.00	12.20	2016 ED1
ANNAN PRESTONFIELD	ANNAN PRIMARY NEW; CB UNMATCHED	42.10	15.77	0.00	26.33	2017 ED1
ANNAN PRESTONFIELD	ANNAN PRIMARY NEW; CB UNMATCHED	18.51	8.35	0.00	10.16	2018 ED1
AUCHNEEL	AUCHNEEL SW/STN NEW;GALLOWHILL A/B/ 689/13/1	46.91	0.00	0.00	46.91	2020 ED1
AUCHNEEL	AUCHNEEL SW/STN NEW;DONDINNIE A/B/ 689/23/1	17.10	10.98	0.34	6.22	2020 ED1
AUCHNEEL	AUCHNEEL SW/STN NEW SPRINGBANK FARM A/B/W/ 689/24/1	4.10	0.00	0.00	4.10	2022 ED1
AUCHNEEL	AUCHNEEL SW STN;ROUTE 7 LOCHANS	1.00	0.00	0.00	1.00	2023 ED1
BARRHILL	BARRHILL ROUTE 26 DRUMMORE	17.94	0.00	0.00	17.94	2022 ED1
CARGENBRIDGE	CARGENBRIDGE RTE 47 PRESTLANDS	74.69	0.00	0.00	74.69	2016 ED1
CARGENBRIDGE	CARGENBRIDGE RTE 12 LOCHFOOT	121.59	0.00	0.00	121.59	2023 ED1
CARRUTHERSTOWN	CARRUTHERSTOWN;ROUTE 2 RUTHWELL	38.15	15.84	0.00	22.31	2021 ED1
CASTLE DOUGLAS	CASTLE DOUGLAS;ROUTE 11 DALBEATTIE	13.80	5.01	0.00	8.79	2015 ED1
CREETOWN	CREETOWN;ROUTE 172 BARGRISTON	28.49	0.00	0.00	28.49	2017 ED1
CREETOWN	CREETOWN;ROUTE 172 NEWTON STEWART	2.80	1.79	0.07	0.94	2021 ED1
DALBEATTIE	DALBEATTIE RT 10/11 CASTLE DOUGLAS	0.91	0.91	0.00	0.00	2018 ED1
DALBEATTIE	DALBEATTIE RT 8 DUNDRENNAN	51.95	15.72	0.00	36.23	2015 ED1
DUMFRIES	DUMFRIES;UPPER KELLBURN AVE S/S	0.79	0.79	0.00	0.00	2015 ED1
DUNSCORE	DUNSCORE ROUTE 8 MONIAIVE	52.12	12.04	0.67	39.50	2018 ED1
DUNSCORE	DUNSCORE ROUTE 5 DUMFRIES	33.77	0.00	0.00	33.77	2022 ED1
EARLSTOUN HYDRO ST T	EARLSTOUN HYDRO ST T;R30 GLENLEE;0015/1	10.97	0.00	0.00	10.97	2022 ED1
FAULDHEAD	FAULDHEAD;KIRKCONNEL SCHOOL S/S	0.73	0.73	0.00	0.00	2016 ED1
FAULDHEAD	FAULDHEAD;ROUTE 44 CENTURY ALUM	22.72	0.00	0.00	22.72	2018 ED1
FAULDHEAD	FAULDHEAD;ROUTE 13 SANQUHAR	21.97	0.00	0.28	21.70	2021 ED1
FAULDHEAD	FAULDHEAD;ROUTE 12	20.85	0.00	0.00	20.85	2021 ED1
FAULDHEAD	FAULDHEAD;ROUTE NO 4	53.44	0.00	0.00	53.44	2022 ED1
GATEHOUSE RIVER	GATEHOUSE RIVER;ROUTE 3 - TONGLAND	51.59	0.00	0.00	51.59	2016 ED1
GATEHOUSE RIVER=GATEHOUSE RIVER	GATEHOUSE RIVER;PLANETREE 0012/1	31.72	0.00	0.00	31.72	2022 ED1
GLENLEE HYDRO ST T	GLENLEE HYDRO ST T;RT 28 DALRY	24.82	7.82	0.43	16.77	2015 ED1
GLENLEE HYDRO ST T	GLENLEE HYDRO ST T;RT 27 GLENLOCHAR	68.39	0.00	0.00	68.39	2022 ED1
GLENLUCE	GLENLUCE;PORT END	34.66	6.10	0.00	28.56	2019 ED1
GLENLUCE	GLENLUCE;ROUTE 21B AUCHENMALG	31.78	9.87	0.23	21.69	2021 ED1
GLENLUCE	GLENLUCE; CB UNMATCHED	0.61	0.00	0.00	0.61	2022 ED1
GRETNA	GRETNA;ROUTE 18	22.22	0.00	0.00	22.22	2018 ED1
GRETNA	GRETNA;ROUTE 09	46.78	14.16	0.00	32.63	2019 ED1
HEATHHALL	HEATHHALL PRIMARY;HEATHHALL	56.48	0.00	0.00	56.48	2016 ED1
HEATHHALL	HEATHHALL PRIMARY;LOWSBORN TERRACE T;HEATHHALL/0231	36.65	8.78	0.00	27.89	2018 ED1
HEATHHALL	HEATHHALL PRIMARY;RTE 1	24.93	9.24	0.00	15.69	2022 ED1
HEATHHALL	HEATHHALL PRIMARY;RTE 7B CLUMPTON	18.61	0.00	0.00	18.61	2022 ED1
HEATHHALL	HEATHHALL PRIMARY;TINVALD DOWNS ROAD	1.81	0.00	0.00	1.81	2022 ED1
HEATHHALL	HEATHHALL PRIMARY;RTE 2	1.71	0.00	0.00	1.71	2022 ED1
KENDOON HYDRO ST T	KENDOON HYDRO ST T; CB UNMATCHED	13.09	0.00	0.00	13.09	2022 ED1
KIRKBANK JOHNS	KIRKBANK JOHNS;ROUTE 6	44.42	0.00	0.00	44.42	2020 ED1
KIRKBANK JOHNS	KIRKBANK JOHNS; CB UNMATCHED	15.87	0.00	0.00	15.87	2022 ED1
KIRKBANK JOHNS	KIRKBANK JOHNS;JOHNSTONEBRIDGE VILLAGE;0012/1	9.15	0.00	0.00	9.15	2022 ED1
LANGHOLM	LANGHOLM; CB UNMATCHED	21.52	0.00	0.00	21.52	2016 ED1
LANGHOLM	LANGHOLM; CB UNMATCHED	0.12	0.00	0.00	0.12	2015 ED1
LANGHOLM	LANGHOLM;ROUTE 11	44.45	11.53	0.00	32.92	2022 ED1
LOCHSIDE MANNERING	LOCHSIDE MANNERING RT 35 DEANS PARK	1.82	1.82	0.00	0.00	2017 ED1
LOCHSIDE MANNERING	LOCHSIDE MANNERING;NEWTON ROAD	1.48	0.00	0.00	1.48	2023 ED1
LOCKERBIE	LOCKERBIE ROUTE 43/7B DUMFRIES	55.67	0.00	0.00	55.67	2015 ED1
LOCKERBIE	LOCKERBIE WEST ACRES S/S	3.00	0.00	0.00	3.00	2017 ED1
LOCKERBIE	LOCKERBIE ROUTE 8 MOFFAT	52.98	0.00	0.00	52.98	2022 ED1
LOCKERBIE to LOCKERBIE	LOCKERBIE;EXPRESS DAIRIES NO.1	3.57	0.00	0.00	3.57	2022 ED1
MIDDLEBIE	MIDDLEBIE RT 38 ECCLEFECHAN	7.47	3.44	0.00	4.03	2017 ED1
MIDDLEBIE	MIDDLEBIE RT 6 GRETNA	22.44	0.00	0.00	22.44	2019 ED1
MIDDLEBIE	MIDDLEBIE RT 11; LANGHOLM	27.01	0.00	0.00	27.01	2022 ED1
MIDDLEBIE	MIDDLEBIE RT 8B LOCKERBIE	18.98	0.00	0.00	18.98	2022 ED1
MOFFAT	MOFFAT RT 6 KIRKBANK	56.46	0.00	0.00	56.46	2015 ED1
MOFFAT	MOFFAT RT 39 COATSGATE	17.17	1.73	0.00	15.44	2022 ED1
NEWTON STEWART	NEWTON STEWART RTE 172/0024/1	21.86	0.00	0.00	21.86	2018 ED1
NEWTON STEWART	NEWTON STEWART RTE 22/0014/1	43.05	0.00	0.00	43.05	2018 ED1
NEWTON STEWART	NEWTON STEWART RTE T3	24.52	11.33	0.00	13.19	2020 ED1
NEWTON STEWART	NEWTON STEWART RTE 114/0013/1	35.63	0.00	0.00	35.63	2020 ED1
NEWTON STEWART	NEWTON STEWART RTE 4/0022/1	60.40	0.00	0.00	60.40	2023 ED1
PENPONT MONI	PENPONT MONI;ROUTE 4 KIRKCONNEL	55.70	0.00	0.12	55.58	2017 ED1
PENPONT MONI	PENPONT MONI;ROUTE NO.20 HOLYWOOD	49.61	14.88	0.06	34.68	2016 ED1
PENPONT MONI	PENPONT MONI;ROUTE 5 DUMFRIES	47.37	0.00	0.45	46.92	2020 ED1
PENPONT MONI	PENPONT MONI;ROUTE NO.15 THORNHILL	48.75	11.50	0.36	37.03	2021 ED1
PENPONT MONI	PENPONT MONI;ROUTE NO.3 TOWNHEAD S/S	44.78	0.00	0.00	44.78	2023 ED1
SORBIE SORB	SORBIE SORB;RT 31 WHITHORN	45.91	0.00	0.00	45.91	2019 ED1
SORBIE SORB	SORBIE SORB;RT 15 SORBIE	37.66	12.68	0.00	24.99	2020 ED1
SORBIE SORB	SORBIE SORB;RT 79 BLADNOCH	27.09	11.33	0.48	15.28	2022 ED1
STELRAD EDINGHAM	STELRAD EDINGHAM;DALBEATTIE 33/11KV S/S	4.78	3.71	0.00	1.07	2022 ED1
STRANRAER	STRANRAER NEW;GAS BOARD VIA BLACKPARKS A/B	0.34	0.34	0.00	0.00	2016 ED1
STRANRAER	STRANRAER NEW;BLACKPARK	0.83	0.00	0.00	0.83	2019 ED1
STRANRAER	STRANRAER NEW;DEER PARK VIA BLACKPARKS A/R	65.61	0.00	0.00	65.61	2020 ED1
STRANRAER to AUCHNEEL	STRANRAER NEW;AUCHNEEL SW/STN No 1	0.21	0.00	0.00	0.21	2016 ED1
STRANRAER to AUCHNEEL	STRANRAER NEW;AUCHNEEL SW/STN No 2	4.86	0.00	0.00	4.86	2022 ED1
TONGLAND DISTRIBUTION	TONGLAND DISTRIBUTION;R1 GLENLOCHAR	50.46	15.34	0.00	35.12	2017 ED1
TONGLAND DISTRIBUTION	TONGLAND DISTRIBUTION;R3 GATEHOUSE	31.37	0.00	0.00	31.37	2020 ED1
TONGLAND DISTRIBUTION	TONGLAND DISTRIBUTION;R49 DUNDRENNAN	46.50	0.00	0.00	46.50	2021 ED1

SP ENERGY NETWORKS

RIIO ED1 ZONE MAPPING

OPERATIONAL ZONE - GEOGRAPHICAL LAYOUT

DUMFRIES & GALLOWAY

33kV DISTRIBUTION NETWORK

VERSION 2
19/06/2013

CREATED BY: ANTHONY DONOGHUE
MODIFIED BY:BRENDAN GALLOWAY

Network Diagram Key

- Transformer (Non Load)
- Transformer (Load)
- Switchgear (Non Load)
- Primary Substation (Load)
- Village Modernisation
- Switchboard (Load)
- Existing 33kV OHL Network
- Planned 33kV OHL Work

Non-Load Related Primary Projects

Primary Name	Asset Type	Job Type	Number
BONNINGTON ROAD PRIMARY	Switchgear	Replacement	1
	Transformer	Replacement	1
BP DALMENY	Transformer	Refurbishment	1
COCKENZIE GRID	Switchgear	Replacement	1
COWGATE	Transformer	Refurbishment	1
EAST LINTON PRIMARY	Switchgear	Retrofit	1
	Transformer	Replacement	1
GEORGE SQUARE LANE P/ARY	Switchgear	Retrofit	1
GORGIE PRIMARY	Transformer	Refurbishment	1
KINGS BLDS A&B PRIMARY	Switchgear	Replacement	1
LOCHEND QUADRANT PRIMARY	Switchgear	Refurbishment	1
NORTH BERWICK PRIMARY	Switchgear	Retrofit	1
PARK ROAD PRIMARY	Switchgear	Replacement	1
PENCAITLAND PRIMARY	Transformer	Replacement	1
PENICUIL PRIMARY	Switchgear	Replacement	1
PENNYWELL ROAD	Transformer	Refurbishment	1
SIGHTHILL FARM	Transformer	Replacement	1
SPOTT ROAD PRIMARY	Switchgear	Retrofit	1
WEST LINTON PRIMARY	Switchgear	Replacement	1
WILLIAM STREET PRIMARY	Switchgear	Replacement	1
	Transformer	Replacement	1

Load Related Primary Projects

Project Title	Substation Name	Asset Type	Job Type	Number
Dalbeattie Reinforcement	DALBEATTIE PRIMARY	Transformer	Reinforcement	2
Dumfries 132 / 11kV Fault Level Resolution	DUMFRIES GSP	Primary Substation	Fault Level	1
Dumfries 33kV Fault Level Resolution	DUMFRIES GSP	Switchboard	Fault Level	1
Ecclefechan Reinforcement	CHAPELCROSS GSP	GSP	Reinforcement	1
Langholm Primary Substation Voltage Reinforcement	LANGHOLM PRIMARY	Voltage Support Device	Reinforcement	1
Penpont Reinforcement	PENPONT PRIMARY	Transformer	Reinforcement	2
Stranraer Primary Substation Voltage Reinforcement	STRANRAER PRIMARY	Voltage Control Device	Reinforcement	1
Tongland 132 / 33kV GSP 33kV Network Integration	TONGLAND GSP	Switchboard	Reinforcement	1

33kV OHL Works

Primary Substation	Circuit Name	OHL Length (km)	Total Poles	Rebuild (km)	Refurbishment (km)	Job Type	Prediction Year
COCKENZIE GSP	COCKENZIE GRID ; PEPPERCRAIG T1 / BLINDW	9.92	107	0.00	9.92	Refurbishment	2016
		6.68	85	0.00	6.68	Refurbishment	2015
		13.14	77	0.00	13.14	Refurbishment	2020
DUNBAR GSP	DUNBAR GRID ; TORNESS T2 / OXWELL MAINS	6.08	64	0.00	6.08	Refurbishment	2017
	DUNBAR GRID ; TORNESS T1 / OXWELL MAINS	16.480	196	16.48	0.00	Rebuild	2017
KAIMES A GSP		2.78	36	2.78	0.00	Rebuild	2015
	KAIMES ; LOANSTONE T2/WEST LINTON T2	41.34	409	0.00	41.34	Refurbishment	2018
		4.38	4	0.00	0.00	0	2015
		41.45	413	0.00	41.45	Refurbishment	2018
KAIMES B GSP	KAIMES ; BURGHLEE T2/PENICUIK T2	8.24	205	0.00	8.24	Refurbishment	2017
PORTOBELLO GSP	PORTOBELLO GRID ; MONKTONHALL T1	5.31	55	5.31	0.00	Rebuild	2016
	PORTOBELLO GRID ; MONKTONHALL T2	9.32	62	0.00	9.32	Refurbishment	2021

1. DEWAR PLACE
2. WILLIAM STREET
3. RANDOLPH LANE
4. ROSE STREET LANE
5. THISTLE COURT
6. ST. JAMES CENTRE
7. CANDLEMAKER ROW
8. MARTIN MILLER
9. S&N VIEWFORTH
10. NB DISTILLERY
11. TOWER PLACE
12. OCEAN DRIVE
13. ANNFIELD
14. GRANTON PARK AVENUE

EDINBURGH & LOTHIANS

11kV OHL Works

Primary Substation	Circuit Name	OHL Length (km)	Rebuild (km)	Refurbishment (km)	Refurbishment (km)	Prediction Year
BARNTON GROVE	BARNTON GROVE PRIMARY;WEST CRAIGS ROAD	1.71	0.00	0.00	1.71	2017 ED1
BELHAVEN FORTH	BELHAVEN PRIMARY;L69/L170 WEST BARNS	7.28	0.00	0.69	6.58	2020 ED1
BELHAVEN FORTH	BELHAVEN PRIMARY;L13/STENTON	29.59	0.00	12.84	16.75	2021 ED1
BURGHLEE	BURGHLEE PRIMARY;BURGHLEE LOCAL R.M.U./319/22/1	2.16	0.00	0.65	1.52	2016 ED1
BURGHLEE	BURGHLEE PRIMARY;L723/L66/319/13/1	8.48	0.00	1.11	7.37	2017 ED1
BURGHLEE	BURGHLEE PRIMARY;L796/319/24/1	1.13	0.00	0.00	1.13	2019 ED1
BURGHLEE	BURGHLEE PRIMARY;L79/319/14/1	9.03	0.00	0.55	8.48	2020 ED1
CURRIE	CURRIE;CURRIEHILL ROAD	0.28	0.00	0.00	0.28	2016 ED1
CURRIE	CURRIE;DOLPHIN ROAD	0.66	0.00	0.00	0.66	2018 ED1
CURRIE	CURRIE;HERIOT WATT SW/STN	0.86	0.00	0.00	0.86	2022 ED1
CURRIE	CURRIE;HERIOT WATT NO.1	0.86	0.00	0.00	0.86	2022 ED1
EAST LINTON	EAST LINTON PRIMARY; CB UNMATCHED	8.70	7.77	0.47	0.45	2016 ED1
EAST LINTON	EAST LINTON PRIMARY; CB UNMATCHED	5.68	0.00	0.00	5.68	2017 ED1
EAST LINTON	EAST LINTON PRIMARY; CB UNMATCHED	3.69	0.00	0.50	3.19	2020 ED1
GILMERTON	GILMERTON PRIMARY; CB UNMATCHED	0.23	0.00	0.00	0.23	2017 ED1
GILMERTON	GILMERTON PRIMARY; CB UNMATCHED	0.73	0.00	0.00	0.73	2021 ED1
LADY VICTORIA	LADY VICTORIA PRIMARY;L175 BIRKENSIDE	29.37	15.44	11.63	2.31	2022 ED1
LADY VICTORIA	LADY VICTORIA PRIMARY;L 206	8.09	0.00	2.80	5.29	2017 ED1
LADY VICTORIA	LADY VICTORIA PRIMARY;L31 MAIN STREET	1.13	0.00	0.00	1.13	2019 ED1
LADY VICTORIA	LADY VICTORIA PRIMARY;MAYFIELD IND ESTATE	1.21	0.00	0.00	1.21	2019 ED1
LADY VICTORIA	LADY VICTORIA PRIMARY;L171	17.41	0.00	1.46	15.95	2022 ED1
LOANSTONE	LOANSTONE PRIMARY;L49	66.16	0.00	11.55	54.61	2016 ED1
LOANSTONE	LOANSTONE PRIMARY;10 WAULKMILL ROAD	0.65	0.00	0.00	0.65	2016 ED1
LOANSTONE	LOANSTONE PRIMARY;ESKMILL ROAD	0.47	0.00	0.00	0.47	2016 ED1
LOANSTONE	LOANSTONE PRIMARY;ROSSLYNLEE HOSPITAL	12.58	0.00	0.84	11.74	2021 ED1
LOANSTONE	LOANSTONE PRIMARY;DALMORE MILL TEE ARMINE PLACE	2.47	0.00	1.07	1.39	2022 ED1
LUGTON	LUGTON PRIMARY;DALKEITH PALACE	3.42	0.00	0.29	3.13	2019 ED1
LUGTON	LUGTON PRIMARY;LUGTON COMPOUND RMU /4065/1	7.00	0.00	0.00	7.00	2023 ED1
MONKTONHALL	MONKTONHALL PRIMARY; CB UNMATCHED	3.43	0.00	0.29	3.14	2019 ED1
MONKTONHALL	MONKTONHALL PRIMARY;MONKTONHALL SUMP PUMP /321/13/1	5.45	5.45	0.00	0.00	2020 ED1
MONKTONHALL	MONKTONHALL PRIMARY;BR SIGNALS /321/12/1	1.08	0.00	0.00	1.08	2022 ED1
MONKTONHALL	MONKTONHALL PRIMARY;MONKTONHALL SECONDARY /321/24/2	2.93	0.00	0.08	2.85	2022 ED1
MONKTONHALL	MONKTONHALL PRIMARY;INVERESK IND EST /321/16/1	0.13	0.00	0.00	0.13	2022 ED1
MONKTONHALL	MONKTONHALL PRIMARY;SMEATON CAMPSITE /321/14/1	3.39	0.00	0.20	3.19	2022 ED1
MORTONHALL	MORTONHALL PRIMARY;BUCKSTONE TERRACE	1.00	0.00	0.00	1.00	2023 ED1
NORTH BERWICK	NORTH BERWICK PRIMARY;DIRLETON AVENUE	0.36	0.00	0.00	0.36	2015 ED1
NORTH BERWICK	NORTH BERWICK PRIMARY;L34 FENTON BARNS/2734/1	5.64	0.00	0.00	5.64	2021 ED1
PENCAITLAND	PENCAITLAND PRIMARY;L756 HUNTLAW	73.53	27.33	8.73	37.47	2021 ED1
PENCAITLAND	PENCAITLAND PRIMARY;WOODHALL ROAD	12.56	0.00	0.10	12.46	2017 ED1
PENCAITLAND	PENCAITLAND PRIMARY;L45 T L736	7.82	0.00	0.70	7.12	2017 ED1
PEPPERCRAIG	PEPPERCRAIG PRIMARY;AMISFIELD A PMAR TEE AMISFIELD B PMAR	46.37	11.45	7.63	27.29	2015 ED1
PEPPERCRAIG	PEPPERCRAIG PRIMARY;L13/L12-MERRYHATTON	14.13	0.00	2.50	11.63	2019 ED1
PEPPERCRAIG	PEPPERCRAIG PRIMARY;ALDERSTON HOUSE AND OFFICES	28.45	0.00	6.97	21.48	2021 ED1
POLTONHALL	POLTONHALL PRIMARY; CB UNMATCHED	1.63	0.00	0.16	1.47	2015 ED1
POLTONHALL	POLTONHALL PRIMARY; CB UNMATCHED	2.53	0.00	0.00	2.53	2015 ED1
POLTONHALL	POLTONHALL PRIMARY; CB UNMATCHED	1.58	0.00	0.00	1.58	2021 ED1
PRESTONPANS	PRESTONPANS PRIMARY;PRESTON CRESCENT SW/STN/4154/1	7.45	0.00	0.00	7.45	2023 ED1
SPOTT RD	SPOTT RD PRIMARY;L29/L1 THURSTON	8.12	0.00	1.66	6.46	2016 ED1
TORNESS	TORNESS PRIMARY;L774 LAWFIELD T L752 T L20 DUNGLAS	51.68	17.67	7.83	26.18	2017 ED1
TORNESS	TORNESS PRIMARY;SKATERAW/L737 T L738	14.67	0.00	4.01	10.65	2022 ED1
TRANENT	TRANENT PRIMARY;L154 TYNEMOUNT A&B A/R /324/14/1	29.20	2.92	2.09	24.19	2015 ED1
TRANENT	TRANENT PRIMARY;FORDS BYGE END BAKERY/LOTHIAN COATED FAB /324/13/1	0.27	0.00	0.00	0.27	2017 ED1
TRANENT	TRANENT PRIMARY;L118 DRUMMORE HOTEL /324/15/1	3.53	0.00	0.16	3.37	2017 ED1
TRANENT	TRANENT PRIMARY;BRIDGE STREET NURSING HOME /324/23/2	0.96	0.00	0.09	0.87	2019 ED1
TRANENT	TRANENT PRIMARY;BROTHERSTON WAY SOUTH/324/17/1	6.32	3.73	0.80	1.79	2019 ED1
TRANENT	TRANENT PRIMARY;L343 ABSW/IRI ELPHINSTONE/324/25/2	5.42	0.00	0.00	5.42	2022 ED1

11kV Planned OHL Work

SP ENERGY NETWORKS

RIIO ED1 ZONE MAPPING

OPERATIONAL ZONE - GEOGRAPHICAL LAYOUT

EDINBURGH & LOTHIANS

33kV DISTRIBUTION NETWORK

VERSION 2
19/06/2013

CREATED BY: ANTHONY DONOGHUE
MODIFIED BY:BRENDAN GALLOWAY

GLASGOW & CLYDE NORTH

Non-Load Related Primary Projects

Primary Name	Asset Type	Job Type	Number
ADMIRAL ST PRIMARY	Switchgear	Replacement	1
ASHGROVE ST PRIMARY	Switchgear	Retrofit	1
BARTIEBEITH RD	Switchgear	Replacement	1
BURNFIELD PRIMARY	Switchgear	Refurbishment	1
BYRES RD PRIMARY	Switchgear	Refurbishment	1
CARDONALD PRIMARY	Switchgear	Refurbishment	1
CHARLES ST PRIMARY	Switchgear	Retrofit	1
	Transformer	Replacement	1
CROOKSTON	Transformer	Replacement	1
CROOKSTON GRID	Switchgear	Replacement	1
EASTERCRAIGS PRIMARY	Switchgear	Refurbishment	1
ECKFORD ST PRIMARY	Switchgear	Refurbishment	1
ELIZABETH STREET PRIMARY	Switchgear	Refurbishment	1
ELLIOT ST PRIMARY	Switchgear	Refurbishment	1
FIRHILL RD PRIMARY	Switchgear	Refurbishment	1
FLEMINGTON ST PRIMARY	Switchgear	Replacement	1
	Transformer	Replacement	1
55 HECLA AVE 55	Transformer	Replacement	1
HELENSBURGH GRID	Switchgear	Replacement	1
KELVINSIDE PRIMARY	Switchgear	Replacement	1
KILLERMONT GRID	Switchgear	Replacement	1
MAUKINFAULD RD PRIMARY	Transformer	Replacement	1
MEADOW RD PRIMARY	Switchgear	Refurbishment	1
NEWLANDS PRIMARY	Switchgear	Refurbishment	1
OLD DUMBARTON PRIMARY	Switchgear	Refurbishment	1
	Transformer	Replacement	1
RALSTON PRIMARY	Switchgear	Replacement	1
ROTTENROW PRIMARY	Switchgear	Refurbishment	1
SHAWPARK ST PRIMARY	Switchgear	Replacement	1
ST ANDREWS CROSS PRIMARY	Switchgear	Replacement	1
STRATHLEVEN GSP	Switchgear	Replacement	1
WEST GEORGE ST G S P	Switchgear	Replacement	1
WESTBURN ROAD	Switchgear	Replacement	1
WHITLAWBURN PRIMARY	Transformer	Replacement	1

Load Related Primary Projects

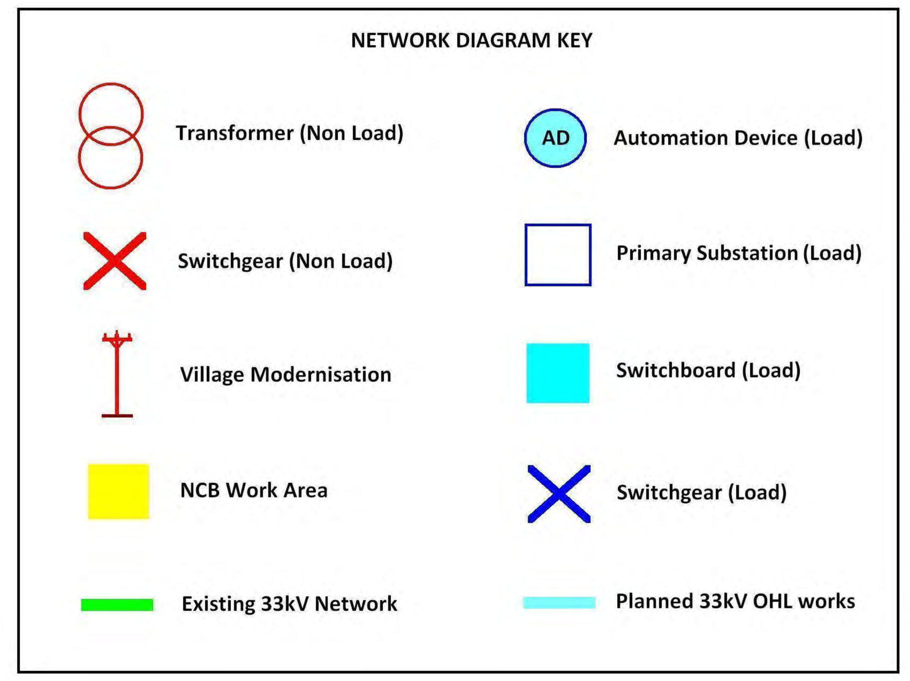
Project Title	Substation Name	Asset Type	Job Type	Number
Crookston 'A' Fault Level Resolution	CROOKSTON GSP	Switchboard	Fault Level	1
Govan 6.6kV Upgrade	ELIZABETH STREET / HELEN STREET	Primary Substation	Reinforcement	1
	HELEN STREET	Primary Substation	Reinforcement	1
	ADMIRAL STREET	Primary Substation	Reinforcement	1
	ST ANDREWS CROSS	Primary Substation	Reinforcement	1
Hillington Reinforcement	New Substation in the Hillington area south of the M8	Primary Substation	Reinforcement	1
Killermont 33kV Fault Level Resolution	KILLERMONT GSP	Switchboard	Fault Level	1
Langside Reinforcement	LANGSIDE PRIMARY	Automation Device	Reinforcement	1
Partick 6.6kV Upgrade	MEADOW ROAD	Primary Substation	Reinforcement	1
	OLD DUMBARTON ROAD	Primary Substation	Reinforcement	1
Strathleven 33kV Fault Level Resolution	STRATHLEVEN GSP	Switchboard	Fault Level	1
West George Street 33kV Fault Level Resolution	WEST GEORGE STREET GSP	Switchboard	Fault Level	2
Westburn Road 33kV Fault Level Resolution	WESTBURN ROAD GSP	Switchboard	Fault Level	1
Yoker Ferry Road Reinforcement	YOKER FERRY ROAD PRIMARY	Primary Substation	Reinforcement	1
	YOKER FERRRY ROAD PRIMARY	Switchgear	Reinforcement	1

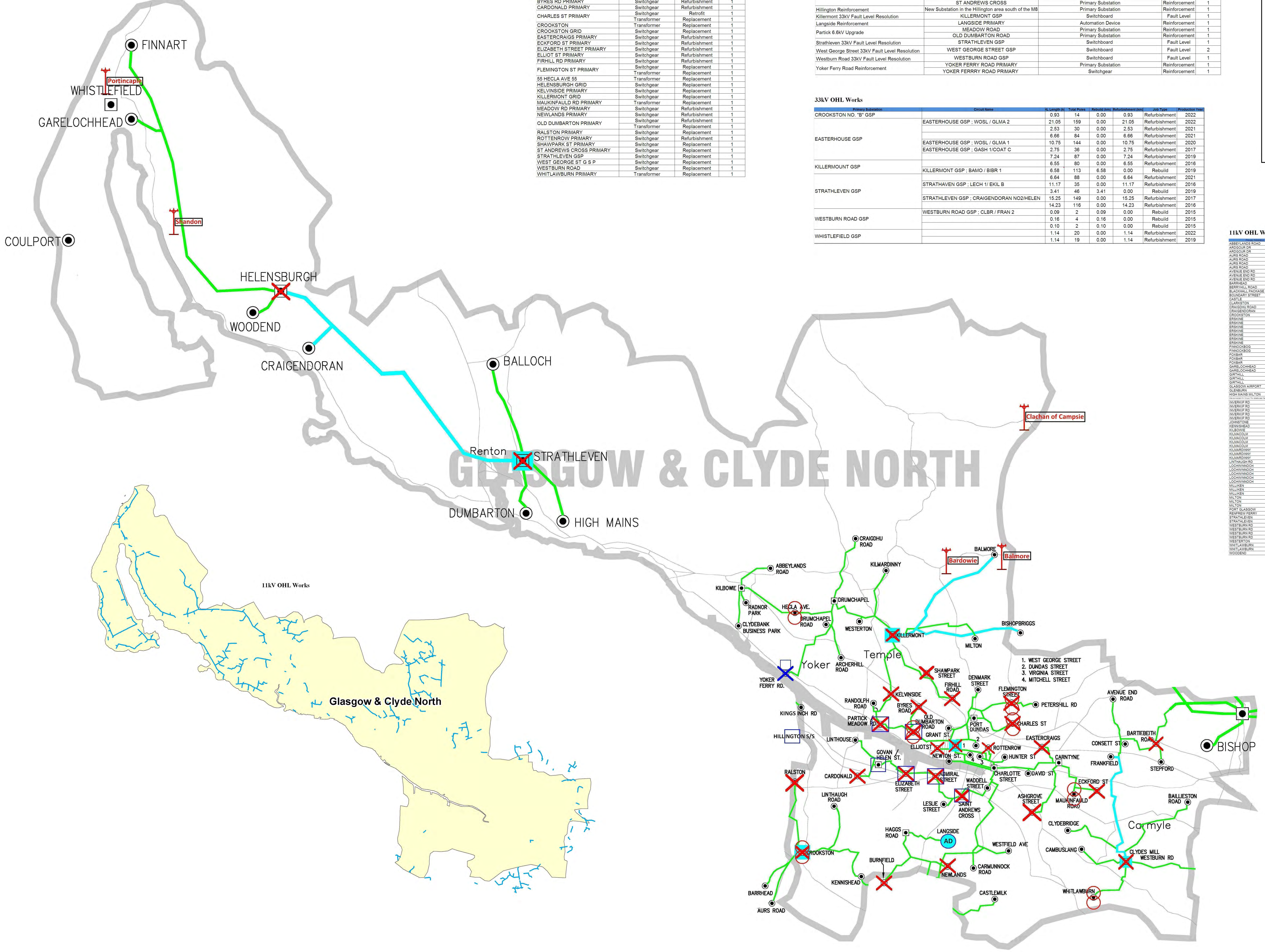
33kV OHL Works

Primary Substation	Circuit Name	OHL Length (km)	Total Poles	Rebuild (km)	Refurbishment (km)	Job Type	Production Year
CROOKSTON NO. "B" GSP		0.93	14	0.00	0.93	Refurbishment	2022
EASTERHOUSE GSP	EASTERHOUSE GSP ; WOSL / GLMA 2	21.05	159	0.00	21.05	Refurbishment	2022
		2.53	30	0.00	2.53	Refurbishment	2021
		6.66	84	0.00	6.66	Refurbishment	2021
	EASTERHOUSE GSP ; WOSL / GLMA 1	10.75	144	0.00	10.75	Refurbishment	2020
	EASTERHOUSE GSP ; GASH 1/COAT C	2.75	36	0.00	2.75	Refurbishment	2017
		7.24	87	0.00	7.24	Refurbishment	2019
KILLERMONT GSP		6.55	80	0.00	6.55	Refurbishment	2016
	KILLERMONT GSP ; BAMO / BIBR 1	6.58	113	6.58	0.00	Rebuild	2019
		6.64	88	0.00	6.64	Refurbishment	2021
STRATHLEVEN GSP	STRATHAVEN GSP ; LECH 1/ EKIL B	11.17	35	0.00	11.17	Refurbishment	2016
		3.41	46	3.41	0.00	Rebuild	2019
	STRATHLEVEN GSP ; CRAIGENDORAN NO2/HELEN	15.25	149	0.00	15.25	Refurbishment	2017
		14.23	116	0.00	14.23	Refurbishment	2016
WESTBURN ROAD GSP	WESTBURN ROAD GSP ; CLBR / FRAN 2	0.09	2	0.09	0.00	Rebuild	2015
		0.16	4	0.16	0.00	Rebuild	2015
		0.10	2	0.10	0.00	Rebuild	2015
WHISTLEFIELD GSP		1.14	20	0.00	1.14	Refurbishment	2022
		1.14	19	0.00	1.14	Refurbishment	2019

11kV OHL Works

Primary Substation	Circuit Name	OHL Length (km)	Rebuild (km)	Re-conductor (km)	Refurbishment (km)	Production Year
ABBEYLANDS ROAD	ABBEYLANDS ROAD PRIMARY;299 FAIFLEY ROAD	9.62	0.00	0.00	9.62	2022 ED1
ARDGOUR DR	ARDGOUR DR PRIMARY; CB UNMATCHED	16.81	0.00	0.00	16.81	2018 ED1
ARDGOUR DR	ARDGOUR DR PRIMARY; CB UNMATCHED	1.10	0.00	0.00	1.10	2021 ED1
AURS ROAD	AURS ROAD PRIMARY;NEILSTON B	23.57	7.95	0.00	15.62	2016 ED1
AURS ROAD	AURS ROAD PRIMARY;DODSIDE ROAD	1.92	0.00	0.00	1.92	2015 ED1
AURS ROAD	AURS ROAD PRIMARY;WEIR AVENUE	0.72	0.00	0.00	0.72	2015 ED1
AURS ROAD	AURS ROAD PRIMARY;SPILLERS KENNOMEAT NO2 CIRCUIT	0.99	0.00	0.00	0.99	2022 ED1
AVENUE END RD	AVENUE END RD PRIMARY;COSHNEUKMUIR	0.45	0.00	0.00	0.45	2017 ED1
AVENUE END RD	AVENUE END RD PRIMARY;33 STATION ROAD	3.01	0.00	0.00	3.01	2017 ED1
AVENUE END RD	AVENUE END RD PRIMARY;SOLWAY RD-HEATER PLACE	2.45	0.00	0.00	2.45	2020 ED1
BARRHEAD	BARRHEAD PRIMARY;BLACKBYRES ROAD /404/22	1.55	0.00	0.00	1.55	2017 ED1
BERRYHILL ROAD	BERRYHILL ROAD PRIMARY;ARDEN PLACE	0.78	0.00	0.00	0.78	2017 ED1
BLACKHALL PACKAGE	BLACKHALL PACKAGE;AFFRIC DRIVE 40/441/23/2	0.23	0.00	0.00	0.23	2016 ED1
BOUNDARY STREET	BOUNDARY STREET;BAKER STREET(BLAIRS)/43922/1	2.43	0.00	0.00	2.43	2017 ED1
CASTLE	CASTLE PRIMARY;CRAIGHLAW AVENUE T LETHAM FARM	18.47	0.00	0.00	18.47	2017 ED1
CLARKSTON	CLARKSTON PRIMARY;NEWFORD GROVE/4605/1	9.90	0.00	0.00	9.90	2021 ED1
CRAIGDHU ROAD	CRAIGDHU ROAD PRIMARY;DOUGLASMUIR QUARRY SW/STN /413/15/	23.90	10.86	5.22	7.82	2016 ED1
CRAIGENDORAN	CRAIGENDORAN;1 DARLIETH RD / NORTH OH	12.27	0.00	0.00	12.27	2017 ED1
CROOKSTON	CROOKSTON 33/11;BREWERS FAYRE HURLET RDT	0.29	0.00	0.00	0.29	2021 ED1
ERSKINE	ERSKINE 33/11 KV PRIMARY;ALLISON AVENUE "C"	0.26	0.00	0.00	0.26	2015 ED1
ERSKINE	ERSKINE 33/11 KV PRIMARY;13 LOMOND PLACE "T"	11.01	0.00	0.00	11.01	2016 ED1
ERSKINE	ERSKINE 33/11 KV PRIMARY;26 FREELANDS RD VIA EAST	0.98	0.00	0.00	0.98	2016 ED1
ERSKINE	ERSKINE 33/11 KV PRIMARY;64 PARK GATE	0.07	0.00	0.00	0.07	2017 ED1
ERSKINE	ERSKINE 33/11 KV PRIMARY;ERSKINE COMMUNITY CENTRE	1.71	0.00	0.00	1.71	2018 ED1
ERSKINE	ERSKINE 33/11 KV PRIMARY;R.O.F. BISHOPTION.	0.18	0.00	0.00	0.18	2020 ED1
ERSKINE	ERSKINE 33/11 KV PRIMARY;ALLANDS AVENUE	2.99	0.00	0.00	2.99	2023 ED1
FINNOCKBOG	FINNOCKBOG PRIMARY INKP; CB UNMATCHED	0.48	0.00	0.00	0.48	2017 ED1
FINNOCKBOG	FINNOCKBOG PRIMARY INKP; CB UNMATCHED	2.60	0.00	0.00	2.60	2021 ED1
FOXBAR	FOXBAR PRIMARY;KENNILWORTH	1.34	0.00	0.26	1.08	2017 ED1
FOXBAR	FOXBAR PRIMARY;GLENIFFER HIGH SCHOOL/4665/1	0.50	0.00	0.50	0.00	2017 ED1
FOXBAR	FOXBAR PRIMARY;ESK DRIVE T JARVIE WAY	2.93	0.00	0.00	2.93	2021 ED1
GARELOCHHEAD	GARELOCHHEAD PRIMARY;012 UPLAND RD T BENDARROC	7.92	0.00	0.00	7.92	2019 ED1
GARELOCHHEAD	GARELOCHHEAD PRIMARY;GARELOCHEAD LOCAL	1.64	0.00	0.00	1.64	2022 ED1
GIRTHILL	GIRTHILL PRIMARY; CB UNMATCHED	0.67	0.67	0.00	0.00	2015 ED1
GIRTHILL	GIRTHILL PRIMARY; CB UNMATCHED	12.33	0.00	0.00	12.33	2019 ED1
GIRTHILL	GIRTHILL PRIMARY;BRIDGE OF WEIR	12.07	0.00	0.00	12.07	2016 ED1
GLASGOW AIRPORT	GLASGOW AIRPORT;42412 GLASGOW AIRPORT NO.1 SUPPLY	1.33	0.00	0.00	1.33	2022 ED1
GLENBURN	GLENBURN PRIMARY;LANGCRAIGS A T KNOCKSIDE	0.50	0.00	0.00	0.50	2016 ED1
HIGH MAINS MILTON	HIGH MAINS MILTON;GLASGOW ROAD LOW MAINS	0.32	0.00	0.00	0.32	2017 ED1
Interconnected HV Circuit. For details see Master Circuit - SP403	BALLOCH PRIMARY;47A COLQUHOUN DR	2.62	0.00	0.00	2.62	2018 ED1
INVERKIP RD	INVERKIP RD PRIMARY GRNK;SKELMORLIE EAST LINE	9.99	0.00	0.00	9.99	2022 ED1
INVERKIP RD	INVERKIP RD PRIMARY GRNK;36 HUNTLY DRIVE	0.22	0.00	0.00	0.22	2016 ED1
INVERKIP RD	INVERKIP RD PRIMARY GRNK;SKELMORLIE WEST LINE	12.40	0.00	0.00	12.40	2022 ED1
INVERKIP RD	INVERKIP RD PRIMARY GRNK;FAULDS PARK NO 2	2.33	0.00	0.00	2.33	2022 ED1
INVERKIP RD	INVERKIP RD PRIMARY GRNK;IBM CALL CENTRE/6546/1	2.27	0.00	0.00	2.27	2022 ED1
JOHNSTONE	JOHNSTONE 33/11 PRIMARY;MARY ST	1.80	0.00	0.00	1.80	2017 ED1
KENNISHEAD	KENNISHEAD PRIMARY S/S;GLEN CLUNIE DRIVE	0.86	0.00	0.00	0.86	2018 ED1
KILBOWIE	KILBOWIE;49A GLENHEAD ROAD	0.05	0.00	0.00	0.05	2015 ED1
KILMACOLM	KILMACOLM PRIMARY KCLM; CB UNMATCHED	10.78	2.34	0.00	8.43	2020 ED1
KILMACOLM	KILMACOLM PRIMARY KCLM;TEE PS10-PS62 LANGBANK LN	10.77	0.00	0.00	10.77	2019 ED1
KILMACOLM	KILMACOLM PRIMARY KCLM; CB UNMATCHED	0.16	0.00	0.00	0.16	2021 ED1
KILMACOLM	KILMACOLM PRIMARY KCLM; CB UNMATCHED	0.80	0.00	0.00	0.80	2022 ED1
KILMARDINNY	KILMARDINNY PRIMARY;23 CRAIGTON AVENUE	11.95	4.10	0.00	7.86	2015 ED1
KILMARDINNY	KILMARDINNY PRIMARY; CB UNMATCHED	6.29	0.00	0.00	6.29	2017 ED1
KILMARDINNY	KILMARDINNY PRIMARY;0261 MILNGAVIE ROAD	0.86	0.00	0.00	0.86	2017 ED1
LINTHAUGH RD	LINTHAUGH RD PRIMARY;EVERTON RD	0.29	0.00	0.00	0.29	2016 ED1
LOCHWINNOCH	LOCHWINNOCH PRIMARY;LOCHWINNOCH No.1/ 443/12/1	1.06	0.00	0.00	1.06	2019 ED1
LOCHWINNOCH	LOCHWINNOCH PRIMARY;ST JOSEPHS NURSING HOME/ 443/11/1	15.04	0.00	0.00	15.04	2022 ED1
LOCHWINNOCH	LOCHWINNOCH PRIMARY;PARKHALL/WARLOCK/ 443/23/2	14.80	3.58	0.00	11.22	2022 ED1
LOCHWINNOCH	LOCHWINNOCH PRIMARY;BEECHBURN CRES/ 443/13/1	6.52	0.00	0.19	6.33	2022 ED1
LOCHWINNOCH	LOCHWINNOCH PRIMARY;LITTLE CLOAK/ 443/21/2	1.29	0.00	0.00	1.29	2022 ED1
MILLIKEN	MILLIKEN PRIMARY;ELLISTON PLACE	19.22	2.92	0.00	16.30	2016 ED1
MILLIKEN	MILLIKEN PRIMARY;DEE PLACE	7.83	7.83	0.00	0.00	2020 ED1
MILLIKEN	MILLIKEN PRIMARY;15 TWEED PL T LITTLE CORS	16.97	0.00	0.00	16.97	2021 ED1
MILTON	MILTON PRIMARY;KENMURE GDNS TEE CATHAY ST/0023/1	0.59	0.00	0.00	0.59	2015 ED1
MILTON	MILTON PRIMARY;SUMMERSTON MEADOWS T LOCHFAULD/0015/1	2.28	0.00	0.00	2.28	2020 ED1
MILTON	MILTON PRIMARY;SUMMERSTON LANDFILL/0016/1	4.46	0.00	0.00	4.46	2021 ED1
PORT GLASGOW	PORT GLASGOW PRIMARY;BROADSTONE	3.71	0.00	0.00	3.71	2019 ED1
RENFREW FERRY	0.00	0.37	0.00	0.00	0.37	2019 ED1
STRATHLEVEN	STRATHLEVEN PRIMARY;ALLAN CRESCENT 'T' 86 BELLSMYRE AVENU	0.63	0.00	0.00	0.63	2020 ED1
STRATHLEVEN	STRATHLEVEN PRIMARY;STRATHLEVEN LOCAL	4.01	0.00	0.44	3.58	2021 ED1
WESTBURN RD	WESTBURN RD PRIMARY;BULLER CRES/0024/1	1.13	0.00	0.00	1.13	2015 ED1
WESTBURN RD	WESTBURN RD PRIMARY;NEWTON MILL/0022/1	1.29	0.00	0.00	1.29	2016 ED1
WESTBURN RD	WESTBURN RD PRIMARY;GARDENSIDE AVENUE	0.30	0.00	0.00	0.30	2021 ED1
WESTBURN RD	WESTBURN RD PRIMARY;KMT CLYDESMILL PLACE	0.14	0.00	0.00	0.14	2022 ED1
WESTERTON	WESTERTON;34 ALBERT DR SW STN	0.27	0.00	0.00	0.27	2019 ED1
WHITLAWBURN	WHITLAWBURN PRIMARY;179A STAFFA TERRACE	0.87	0.00	0.00	0.87	2015 ED1
WHITLAWBURN	WHITLAWBURN PRIMARY;DUKES ROAD LEISURE CENRTE/ 0024/1	12.04	2.03	0.00	10.01	2017 ED1
WOODEND	WOODEND PRIMARY;O20 GILLESPIE DRIVE	19.17	0.00	0.00	19.17	2018 ED1





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VERSION 2
19/06/2013

CREATED BY: ANTHONY DONOGHUE
MODIFIED BY: BRENDAN GALLOWAY

NETWORK DIAGRAM KEY

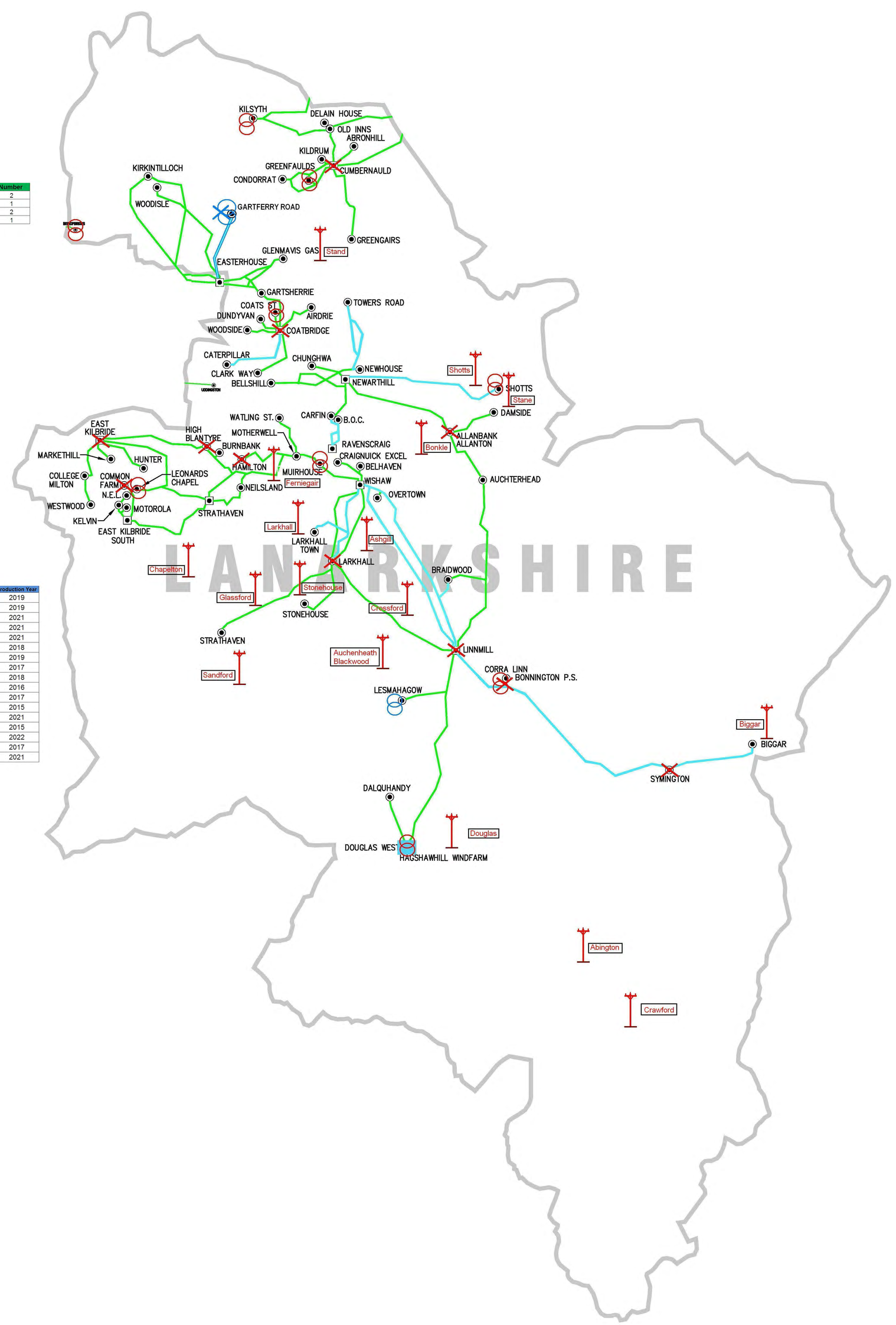
- Transformer (Load)
- Transformer (Non Load)
- Switchgear (Load)
- Switchgear (Non Load)
- Switchboard (Load)
- Village Modernisation
- 33 kV OHL Works
- 33 kV Existing Network
- 33 kV New Circuit

Load Related Primary Projects

Project Title	Substation Name	Asset Type	Job Type	Number
Douglas West / Lesmahagow Relief Reinforcement	Lesmahagow Primary	Transformer	Reinforcement	2
	Douglas West Primary	Switchboard	Reinforcement	1
Gartferry Road Reinforcement	Gartferry Road Primary	Feeder Breaker	Reinforcement	2
		Circuit	Reinforcement	1

33kV OHL Works

Primary Substation	Circuit Name	OHL Length (km)	Total Poles	Rebuild (km)	Refurbishment (k	Job Type	Production Year
COATBRIDGE GSP	COATBRIDGE C ; CATERPILLAR NO2	2.31	26	2.31	0.00	Rebuild	2019
	COATBRIDGE C ; CATERPILLAR NO1	2.37	25	2.37	0.00	Rebuild	2019
EAST KILBRIDE GSP		0.00		0.00	0.00		2021
		0.00		0.00	0.00		2021
LARKHALL 33kV		7.81	90	0.00	7.81	Refurbishment	2021
LINMILL GSP	LINNMILL GSP ; LIN/CORRA LINN	3.72	177	0.00	3.72	Refurbishment	2018
	LINNMILL GSP ; BRAD 2/WISHAW A	33.88	386	0.00	33.88	Refurbishment	2019
	LINNMILL GSP ; CORL 1 / BIGGAR	22.55	265	0.00	22.55	Refurbishment	2017
	LINNMILL GSP ; BRAD 1 /WISHAW A	12.63	143	12.63	0.00	Rebuild	2018
NEWARTHILL GSP		10.84	112	0.00	10.84	Refurbishment	2016
		2.30	36	0.00	2.30	Refurbishment	2017
	NEWARTHILL GSP (NEW) ; SHOTTS 1	10.96	115	10.96	0.00	Rebuild	2015
		2.94	30	0.00	2.94	Refurbishment	2021
RAVENSCRAIG GSP		1.05	10	0.00	1.05	Refurbishment	2015
		1.08	10	0.00	1.08	Refurbishment	2022
WISHAW "A" GSP		6.05	72	0.00	6.05	Refurbishment	2017
		5.58	76	0.00	5.58	Refurbishment	2021

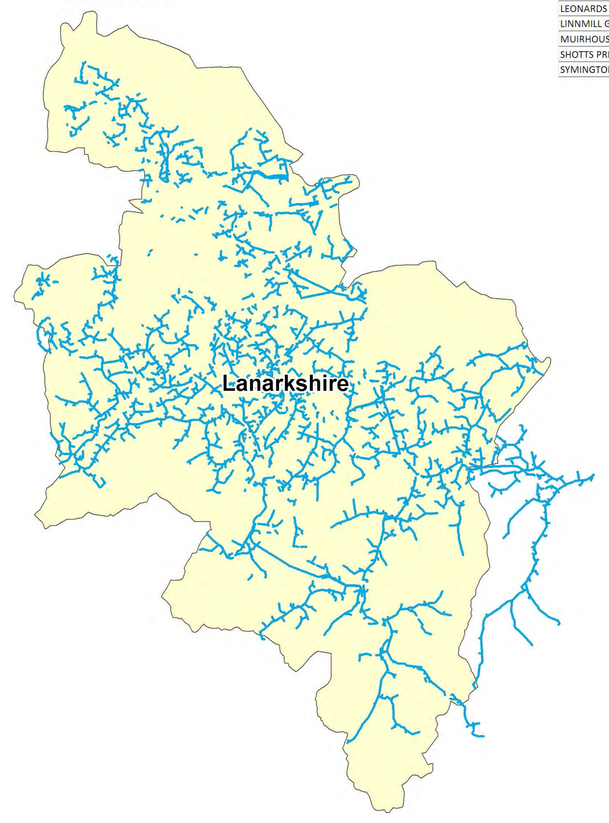


LANARKSHIRE

Non-Load Related Primary Projects

Primary Name	Asset Type	Job Type	Number
ALLANBANK ALLANTON	Switchgear	Replacement	1
BALMORE B/VILLAGE	Transformer	Replacement	1
BISHOPBRIGGS	Transformer	Replacement	1
COATBRIDGE C GRID	Switchgear	Replacement	1
COAT STREET	Transformer	Replacement	1
COMMON FARM	Switchgear	Refurbishment	1
CORRA LINN	Switchgear	Retrofit	1
	Transformer	Replacement	1
CUMBERNAULD GRID	Switchgear	Replacement	1
Douglas West	Switchgear	Replacement	1
	Transformer	Replacement	1
DOUGLAS WEST	Switchgear	Replacement	1
EAST KILBRIDE SOUTH GRID	Switchgear	Replacement	1
GREENFAULDS	Transformer	Replacement	1
HAMILTON	Switchgear	Refurbishment	1
HIGH BLANTYRE	Switchgear	Refurbishment	1
KILSYTH	Transformer	Replacement	1
LARKHALL	Switchgear	Replacement	1
LEONARDS CHAPEL	Transformer	Replacement	1
LINNMILL GRID	Switchgear	Replacement	1
MUIRHOUSE	Transformer	Replacement	1
SHOTTS PRIMARY	Transformer	Replacement	1
SYMINGTON	Switchgear	Retrofit	1

11kV OHL Works



11kV OHL Works

Primary Substation		OHL Length (km)	Rebuild (km)	Refurbishment (km)	Job Type	Production Year
AIRDRIE	AIRDRIE 33/11;CAIRNHOPE "T" DEVONVIEW	2.03	0.62	0.00	1.41	2016 ED1
ALLANBANK ALLANTON	ALLANBANK ALLANTON;MEADOWFIELD	6.86	0.00	0.00	6.86	2017 ED1
ALLANBANK ALLANTON	ALLANBANK ALLANTON;AUCHTERHEAD	5.54	0.00	0.00	5.54	2017 ED1
ALLANBANK ALLANTON	ALLANBANK ALLANTON;MILL RD/0012/1	4.28	0.92	0.27	3.09	2018 ED1
ALLANBANK ALLANTON	ALLANBANK ALLANTON;HARTWOOD	15.78	4.94	0.72	10.13	2019 ED1
ALLANBANK ALLANTON	ALLANBANK ALLANTON;FORTH/BUCHTKNOWE PT	15.61	0.00	0.00	15.61	2022 ED1
BIGGAR	BIGGAR 33/11;BIGGAR AUX	74.62	0.00	0.00	74.62	2016 ED1
BRAIDWOOD	BRAIDWOOD;BELLFIELD	7.00	3.19	0.00	3.81	2017 ED1
BRAIDWOOD	BRAIDWOOD;NEW CARLUKE	2.94	0.00	0.00	2.94	2020 ED1
BRAIDWOOD	BRAIDWOOD;NETWORK TX	18.66	0.00	0.00	18.66	2023 ED1
BURNBANK HIGH BL BBANK	BURNBANK HIGH BL BBANK;BURNBANK S16	11.89	0.00	0.00	11.89	2023 ED1
CARFIN	CARFIN;CLEEKHIMIN	0.20	0.00	0.00	0.20	2015 ED1
CARFIN	CARFIN;GOWKHALL S/S	2.13	0.00	0.00	2.13	2020 ED1
CATERPILLAR	CATERPILLAR;COCKHILL	1.00	0.00	0.00	1.00	2023 ED1
COATS STREET	COATS STREET;MANOR PARK B	0.05	0.05	0.00	0.00	2015 ED1
COLLEGE MILTON	COLLEGE MILTON NEW;SPARE /832/16/1	5.22	0.00	0.00	5.22	2020 ED1
COLLEGE MILTON to COLLEGE MILTON	COLLEGE MILTON NEW;LE ROSE /832/13/1	2.76	1.42	0.00	1.34	2018 ED1
CORRA LINN	CORRA LINN;TOWER A/B	38.88	16.41	0.00	22.46	2017 ED1
CORRA LINN	CORRA LINN;BANKHEAD/0011/1	1.25	1.25	0.00	0.00	2015 ED1
CORRA LINN	CORRA LINN; CB UNMATCHED	26.17	7.89	0.00	18.28	2015 ED1
CORRA LINN	CORRA LINN; CB UNMATCHED	5.47	0.00	0.00	5.47	2023 ED1
CORRA LINN to STONEBYRES P.S	CORRA LINN;STONEBYRES AUX.NO2	2.77	0.00	0.00	2.77	2022 ED1
CORRA LINN to STONEBYRES P.S	CORRA LINN;STONEBYRES AUX. NO1	0.90	0.90	0.00	0.00	2022 ED1
CORRA LINN to SYMINGTON	CORRA LINN; CB UNMATCHED	10.38	0.00	0.08	10.30	2015 ED1
DOUGLAS WEST	DOUGLAS WEST;WELLDALE/0015/1	2.38	0.00	0.00	2.38	2020 ED1
DOUGLAS WEST	DOUGLAS WEST;DOUGLAS ELMBANK/ 0023/1	8.06	4.79	0.00	3.27	2020 ED1
DOUGLAS WEST	DOUGLAS WEST;DOUGLAS WOOD ABSW/0014/1	10.14	0.00	0.00	10.14	2022 ED1
DOUGLAS WEST	DOUGLAS WEST;DOUGLAS WEST ABSW/0024/1	13.83	0.00	0.00	13.83	2022 ED1
DUNDYVAN	DUNDYVAN;HERITAGE GATE/0016/1	1.22	1.22	0.00	0.00	2015 ED1
DUNDYVAN	DUNDYVAN;DUNDYVAN PRIMARY	0.05	0.00	0.00	0.05	2017 ED1
GARTFERRY ROAD	GARTFERRY ROAD;MOSSWATER EAST T GRAYSH	3.33	0.00	0.00	3.33	2022 ED1
GARTFERRY ROAD	GARTFERRY ROAD;GARTMORE	3.35	0.00	0.00	3.35	2022 ED1
GARTSHERRIE	GARTSHERRIE;HORNOCK ROAD	0.41	0.41	0.00	0.00	2015 ED1
GARTSHERRIE	GARTSHERRIE;WILTON STREET	3.17	0.00	0.00	3.17	2016 ED1
GARTSHERRIE	GARTSHERRIE;BEDLAY NO1 WEST	17.94	0.00	0.00	17.94	2022 ED1
HIGH BLANTYRE	HIGH BLANTYRE; CB UNMATCHED	8.91	0.00	0.00	8.91	2016 ED1
Interconnector/HV Circuit. For details see Master Circuit - SP8313	SYMINGTON;THANKERTON	49.80	0.00	0.00	49.80	2016 ED1
KIRKINTILLOCH	KIRKINTILLOCH;SOUTHBANK STORES/848/11	0.80	0.00	0.00	0.80	2015 ED1
KIRKINTILLOCH	KIRKINTILLOCH;MERKLAND PLACE/848/21	0.80	0.80	0.00	0.00	2017 ED1
KIRKINTILLOCH	KIRKINTILLOCH;DONALDSON ST/848/13	4.50	3.50	0.00	1.00	2019 ED1
LARKHALL	LARKHALL 33KV; CB UNMATCHED	19.29	5.99	0.00	13.30	2021 ED1
LARKHALL	LARKHALL 33KV; CB UNMATCHED	8.93	0.00	0.00	8.93	2021 ED1
LARKHALL TOWN	LARKHALL TOWN; CB UNMATCHED	11.86	0.00	0.00	11.86	2015 ED1
LESMAHAGOW	LESMAHAGOW;BURNFOOT ABSW	9.85	0.00	0.00	9.85	2015 ED1
LESMAHAGOW	LESMAHAGOW;AULDTON VIA GLENDEVON	6.56	0.00	0.00	6.56	2016 ED1
LESMAHAGOW	LESMAHAGOW;DILLARBURN ABSW VIA NETHANHE	8.91	3.38	0.00	5.53	2021 ED1
MUIRHOUSE	MUIRHOUSE 33/11;DALZIEL WOOD T MOTEC 2	0.29	0.00	0.00	0.29	2015 ED1
NEILSLAND	NEILSLAND 33/11;NEILSLAND AUX	3.90	1.78	0.23	1.89	2017 ED1
NEWHOUSE	NEWHOUSE;CHAPELMAIN /863/26	0.33	0.00	0.00	0.33	2016 ED1
NEWHOUSE	NEWHOUSE;MEWHOUSE PUMPS /863/12	16.82	1.23	0.22	15.37	2016 ED1
NEWHOUSE	NEWHOUSE;MID DUNALASTAIR /863/27	0.46	0.00	0.00	0.46	2018 ED1
OVERTOWN	OVERTOWN;BARTONHALL T-OFF GILL	1.46	1.46	0.00	0.00	2015 ED1
OVERTOWN	OVERTOWN;ALLER HILL	2.00	0.84	0.00	1.16	2017 ED1
OVERTOWN	OVERTOWN;GILLRAIL	5.99	0.00	0.18	5.81	2021 ED1
SHOTTS	SHOTTS PRIMARY;ALMOND T RUSSELL BENHAR	16.22	6.36	0.00	9.86	2016 ED1
SHOTTS	SHOTTS PRIMARY;BENHAR ROAD	8.79	0.00	0.00	8.79	2020 ED1
SHOTTS	SHOTTS PRIMARY;TWIN TANKS A/B/0012/1	12.95	0.00	0.00	12.95	2022 ED1
SHOTTS	SHOTTS PRIMARY;BLINDBURN A/B	1.13	1.13	0.00	0.00	2022 ED1
STONEBYRES P.S	STONEBYRES P.S;KIRKFIELDBANK GVR/0023/1	21.58	0.00	0.00	21.58	2015 ED1
STONEBYRES P.S	STONEBYRES P.S;HALLHILL A/B/0024/1	15.95	5.93	0.00	10.02	2020 ED1
STONEBYRES P.S	STONEBYRES P.S;CAIRNIEPARK A/B/0013/1	3.12	0.00	0.00	3.12	2018 ED1
STONEBYRES P.S	STONEBYRES P.S;BRODIEHILL A/B/0012/1	5.97	3.95	0.00	2.02	2019 ED1
STONEBYRES P.S	STONEBYRES P.S;CLYDEBANKWOOD A/B/0022/1	6.29	0.00	0.00	6.29	2022 ED1
STONEHOUSE	STONEHOUSE 33/11; CB UNMATCHED	21.99	19.26	0.00	2.73	2015 ED1
STONEHOUSE	STONEHOUSE 33/11; CB UNMATCHED	18.81	0.00	0.00	18.81	2017 ED1
STONEHOUSE	STONEHOUSE 33/11; CB UNMATCHED	2.78	0.00	0.00	2.78	2019 ED1
STRATHAVEN	STRATHAVEN; CB UNMATCHED	48.24	18.75	1.67	27.82	2015 ED1
STRATHAVEN	STRATHAVEN; CB UNMATCHED	1.22	0.00	0.00	1.22	2016 ED1
SYMINGTON	SYMINGTON;BROADFIELD ABSW/0011/1	50.24	0.00	0.00	50.24	2016 ED1
SYMINGTON	SYMINGTON;CALYHOLES	0.97	0.00	0.00	0.97	2021 ED1
TOWERS ROAD	TOWERS ROAD;STIRLING RD I E	0.59	0.59	0.00	0.00	2015 ED1
TOWERS ROAD	TOWERS ROAD;CALDERVALE FORGE	0.64	0.64	0.00	0.00	2015 ED1
TOWERS ROAD	TOWERS ROAD;ST PHILLIPS SCHOOL	5.56	4.25	0.00	1.30	2016 ED1
TOWERS ROAD	TOWERS ROAD;DISTILLERY PARK	1.42	0.48	0.00	0.94	2019 ED1
TOWERS ROAD	TOWERS ROAD;CASTLE QUADRANT	6.05	4.28	0.00	1.77	2020 ED1
UDDINGSTON	UDDINGSTON;HUME PARK	0.45	0.45	0.00	0.00	2017 ED1
WESTWOOD	WESTWOOD 33/11; CB UNMATCHED	32.20	0.00	0.48	31.71	2015 ED1
WOODISLE	WOODISLE;AULDISLE	1.45	1.45	0.00	0.00	2016 ED1
WOODSIDE	WOODSIDE 33/11;CUPARHEAD	0.19	0.00	0.00	0.19	2015 ED1

SP ENERGY NETWORKS

RIIO ED1 ZONE MAPPING

OPERATIONAL ZONE - GEOGRAPHICAL LAYOUT

LANARKSHIRE

33kV DISTRIBUTION NETWORK

VERSION 2
19/06/2013

CREATED BY: MARIA ANZOLA
MODIFIED BY:BRENDAN GALLOWAY

NETWORK DIAGRAM KEY

- Transformer (Non Load)
- Transformer (Load)
- Switchgear (Non Load)
- Substation (Load)
- Village Modernisation
- Switchboard (Load)
- Existing 33kV Network
- 33kV OHL Works
- New 33kV Circuit
- 132 kV Transformer Refurbishment
- 132kV Switchgear

Additional Equipment

11 kV NCBs	11 kV RMUs	11 kV Transformers
18	288	120

Network Circuit Breaker Locations

Location	Total
BEWSEY PUMP-011	5
CAUSEWAY PUMPING STN-011	3
I C I VIELLE PLANT-011	3
WEIR ST PUMP STATION-011	3
WINWICK WATERWORKS-011	4

Load Related Primary Projects

Project Title	Site Name	Asset Type	Job Type	Number	Production Year
Anderton 33/11kV Reinforcement	Anderton to Winnington	Circuit	Reinforcement	1	Post 2019
	Anderton	Primary Transformer	Reinforcement	1	
Civic Centre – Claughton Ave – Electricity Street 33/11kV Reinforcement	Electricity Street	Primary Transformer	Reinforcement	1	2017
		Substation	Reinforcement	1	
		Switchboard	Reinforcement	1	
Cledford 33/11kV Reinforcement	Cledford	Primary Transformer	Reinforcement	1	2017
		Switchboard	Reinforcement	1	
Duckington 33/11kV Reinforcement	Duckington	Primary Transformer	Reinforcement	1	2016
Lostock 33kV Reinforcement	Hartford to Lostock grid	Circuit	Reinforcement	1	2014
	Winsford grid	Grid Transformer	Reinforcement	1	
Ringway 33/11kV Substation High Voltage Reinforcement	Mobberley to Ringway	Circuit	Reinforcement	1	2017
	Ringway	Primary Transformer	Reinforcement	1	
	Ringway	Switchboard	Reinforcement	1	
Warrington 33kV Network Fault Level Reinforcement	Thelwall Grid	Grid Transformer	Reinforcement	1	Post 2015
Wistaston Hall 33/11kV Reinforcement	Wistaston Hall	Primary Transformer	Reinforcement	1	2018

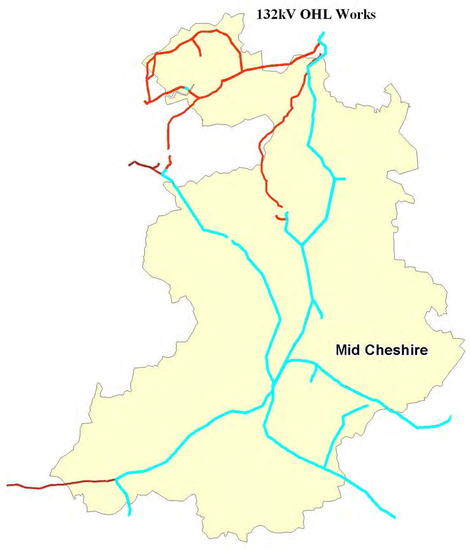
Non-Load Related Primary Projects

Primary Substation	Asset Type	Number
ANDERTON-011	11kV Primary Board	1
AUDLEM-033	33kV CB	2
B RLY STEELWORKS-011	11kV Primary Board	1
B RLY STEELWORKS-033	Transformer	2
CHURCH LAWTON-033	33kV CB	2
CREWE-033	Transformer	1
CROWTON-033	Transformer	1
DUCKINGTON-033	33kV CB	7
EDEN VALE-011	11kV Primary Board	1
GADBROOK-011	11kV Primary Board	1
GADBROOK-033	Transformer	1
HARTFORD-033	33kV CB	8
HIGHFIELD STREET	11kV Primary Board	1
HOLMES CHAPEL-033	33kV CB	2
LOSTOCK GRID-033	Transformer	1
	33kV CB	9
NEWHALL-033	Transformer	1
ORFORD-033	33kV RMU	1
	Transformer	1
PRIMROSE HALL-033	33kV CB	4
SANDBACH-033	33kV CB	6
SMALLWOOD-033	33kV CB	2
STAPELEY-033	33kV CB	2
STOCKTON HEATH-011	11kV Primary Board	1
TACO PLASTICS-011	11kV Primary Board	1
WEAVER IND EST-033	Transformer	1
WESTON-033	Transformer	1
WRENBURY FRITH-033	33kV CB	2

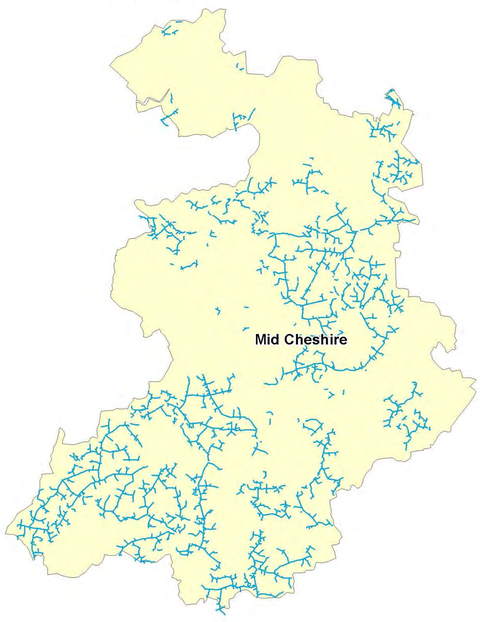
11kV OHL Works

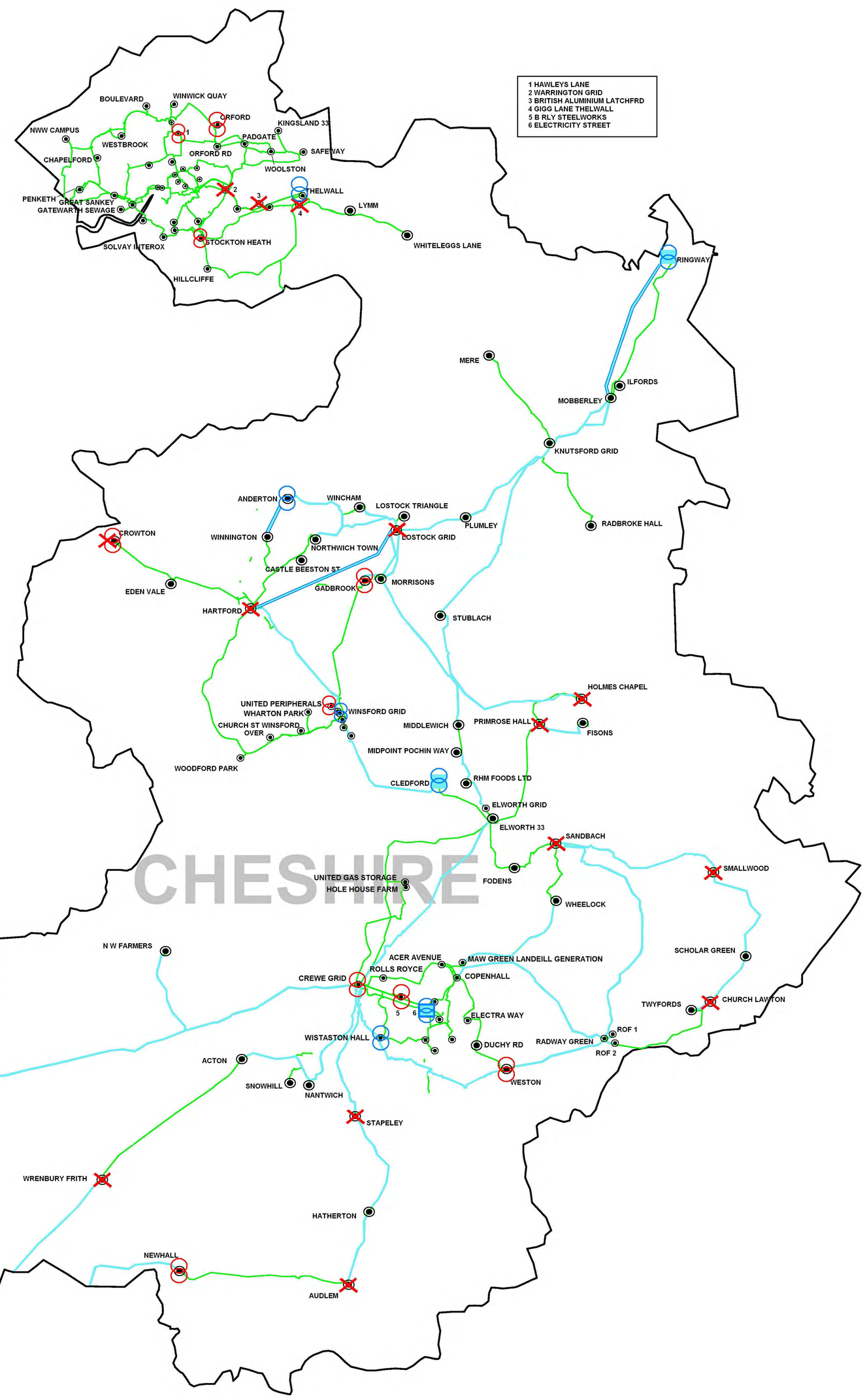
Primary Substation	Circuit Name	OHL Length (km)	REBUILD (km)	RECONDUCTOR (km)	REFURBISHMENT (km)	Production Year (km)
ACER AVENUE	ACER AVENUE:-OHL 2656/Heron Close	5.739	3.08	1.00	1.67	2015
ACTON	ACTON:-Grammar School / Nantwich L14841	1.490	0.00	0.10	1.39	2017
ACTON	ACTON:-Hurleston Res 'B' / Drome Fm L7421	9.685	0.00	3.25	6.43	2018
ACTON	ACTON:-Sound / Newhall L2397	18.779	0.00	1.50	17.28	2020
ANDERTON	ANDERTON:-Marbury / Comberbach	18.053	0.00	0.00	18.05	2020
ANDERTON to ANDERTON	ANDERTON:-ANDERTON CONCRETE	4.528	0.00	0.00	4.53	2019
AUDLEM	AUDLEM:-LD 67/HANKELOW	9.471	0.00	2.46	7.01	2019
AUDLEM	AUDLEM:-L13248/Coole / Newhall	28.018	0.00	7.93	20.09	2020
AUDLEM	AUDLEM:-L8929/Buerton / Shavington	18.928	0.00	2.06	16.87	2020
CASTLE BEESTON ST	CASTLE BEESTON ST:-The Pippins	1.390	1.39	0.00	0.00	2015
CHURCH LAWTON	CHURCH LAWTON:-CHERRY TREE AVE / LINE 6814	3.382	0.00	1.82	1.56	2016
CHURCH LAWTON	CHURCH LAWTON:-CINDER HILL / LINE 14300	7.689	0.00	1.64	6.05	2016
CHURCH ST WINSFORD	CHURCH ST WINSFORD:-Hill Street Pumping Station	0.714	0.00	0.00	0.71	2017
CREWE GRID	CREWE GRID:-Rookery Hall LD191	9.787	4.10	0.59	5.10	2016
CREWE GRID	CREWE GRID:-Halton Drive L7249	0.119	0.00	0.00	0.12	2018
CREWE GRID	CREWE GRID:-Sewage Works L7353	28.908	0.00	1.60	27.30	2018
CREWE GRID	CREWE GRID:-C.H.K.	1.196	0.00	0.00	1.20	2019
CREWE GRID	CREWE GRID:-CHESHIRE CLOTHING L7262	3.735	0.00	0.77	2.97	2022
CROWTON	CROWTON:-Acton Bridge	13.506	0.00	0.00	13.51	2018
DUCKINGTON	DUCKINGTON:-L5084 Larkton House (Malpas)	17.563	0.00	0.58	16.99	2015
DUCKINGTON	DUCKINGTON:-L5085 CUDDINGTON	31.199	0.00	0.59	30.61	2016
DUCKINGTON	DUCKINGTON:-L5065 Pump House (Local Tx)	37.320	0.00	2.94	34.38	2016
EDEN VALE	EDEN VALE:-Mayfield Drive	3.050	1.71	0.09	1.25	2018
EDEN VALE	EDEN VALE:-Acton Bridge / Tower Lane	5.940	0.00	0.19	5.75	2021
FODENS	FODENS:-SAXON	1.350	0.00	0.00	1.35	2017
HATHERTON	HATHERTON:-HUNSTERSON	19.752	0.00	0.27	19.48	2022
HATHERTON	HATHERTON:-STAPELEY	3.186	0.00	0.00	3.19	2022
HOLMES CHAPEL	HOLMES CHAPEL:-Brookfield Crescent	17.801	0.00	2.04	15.76	2015
HOLMES CHAPEL	HOLMES CHAPEL:-Cranage Mill / Goostrey	4.430	0.00	0.00	4.43	2017
HOLMES CHAPEL	HOLMES CHAPEL:-Elm Drive	10.596	0.00	0.00	10.60	2019
HOLMES CHAPEL	HOLMES CHAPEL:-Twemlow / Swettenham	15.456	0.00	2.18	13.27	2021
KNUTSFORD GRID	KNUTSFORD GRID:-Meadow Drive	0.898	0.00	0.00	0.90	2021
LEVERS CROSSFIELD to CROSS	LEVERS CROSSFIELD:-Dixon St	0.925	0.00	0.00	0.93	2021
LOSTOCK GRID	LOSTOCK GRID:-Shell PB2 L0969	20.109	0.00	0.00	20.11	2016
LOSTOCK GRID	LOSTOCK GRID:-Farm Road	0.778	0.00	0.00	0.78	2020
LOSTOCK GRID	LOSTOCK GRID:-Cellco L0280	2.386	0.00	0.00	2.39	2021
LYMM	LYMM:-Highfield Road	4.985	4.99	0.00	0.00	2015
MERE	MERE:-Tabley Park M/S Feeder	9.525	0.00	0.00	9.53	2017
MIDDLEWICH	MIDDLEWICH:-Firmin Coates / Marsh Lane	11.882	0.00	0.00	11.88	2017
MIDDLEWICH	MIDDLEWICH:-Holmes Chapel L3226/ PROLOGIS	0.082	0.00	0.00	0.08	2022
MIDDLEWICH	MIDDLEWICH:-TRAVEL LODGE	0.219	0.00	0.00	0.22	2022
MOBBERLEY	MOBBERLEY:-Townfield Road / Knutsford	6.257	0.00	0.00	6.26	2017
MOBBERLEY	MOBBERLEY:-Carlisle Close / Ringway	18.249	0.00	0.42	17.83	2019
MORRISONS	MORRISONS:-ICI ETHYLENE	2.642	2.64	0.00	0.00	2016
MORRISONS	MORRISONS:-L0212 MARSH LN M/S	15.767	0.00	0.00	15.77	2017
MORRISONS	MORRISONS:-BUSINESS CENTRE / L0208	2.326	0.00	0.00	2.33	2022
N W FARMERS	N W FARMERS:-Bunbury M/S	11.629	0.00	1.49	10.14	2016
N W FARMERS	N W FARMERS:-Rowlinson Timber	1.051	0.00	0.00	1.05	2019
N W FARMERS	N W FARMERS:-Calveley	15.908	0.00	3.30	12.61	2022
NEWHALL	NEWHALL:-Newhall Dairies L15342	1.642	3.41	0.00	-1.76	2017
NEWHALL	NEWHALL:-Audlem L9394	0.086	0.09	0.00	0.00	2019
NEWHALL	NEWHALL:-Audlem / Acton LD67	18.068	0.00	2.65	15.42	2021
ORFORD	ORFORD:-WINDERMERE AVE	3.229	0.00	0.00	3.23	2016
OVER	OVER:-Brindley Avenue	0.958	0.96	0.00	0.00	2017
PRIMROSE HALL	PRIMROSE HALL:-Middlewich	13.271	0.00	0.00	13.27	2017
PRIMROSE HALL	PRIMROSE HALL:-Cranage Colony B	7.310	0.00	0.00	7.31	2019
RADBROKE HALL	RADBROKE HALL:-Peover / Middlewich	10.672	0.00	0.00	10.67	2017
RADBROKE HALL	RADBROKE HALL:-Marthall / Ollerton	9.542	0.00	0.00	9.54	2019
RADBROKE HALL	RADBROKE HALL:-Asworth Park / Plumley	8.479	0.00	0.00	8.48	2019
RHM FOODS LTD	RHM FOODS LTD:-Metalair	0.175	0.00	0.00	0.18	2022
RINGWAY	RINGWAY:-Greengates	4.038	0.00	0.00	4.04	2017
RINGWAY	RINGWAY:-FOUR SEASONS HOTEL	5.482	0.00	0.00	5.48	2020
RINGWAY	RINGWAY:-M56 Compound	5.017	0.00	0.00	5.02	2022
SANDBACH	SANDBACH:-Arclid	7.987	0.00	0.00	7.99	2017
SANDBACH	SANDBACH:-Crewe Grid	24.347	0.00	6.84	17.51	2021
SANDBACH	SANDBACH:-Vicarage Lane	1.350	0.00	0.00	1.35	2022
SMALLWOOD	SMALLWOOD:-Arclid L3538	13.111	7.62	0.00	5.49	2016
STAPELEY	STAPELEY:-Newcastle Rd / L1068 (Shavington)	4.996	5.00	0.00	0.00	2015
STAPELEY	STAPELEY:-Oakbank Close / L1507 (Willaston)	2.875	0.00	0.00	2.88	2016
STAPELEY	STAPELEY:-NMW Computers / L1066 (Audlem)	14.169	7.05	2.21	4.91	2017
STAPELEY	STAPELEY:-Local / LD87 (Nantwich)	3.132	0.00	0.00	3.13	2021
STOCKTON HEATH	STOCKTON HEATH:-West Avenue	3.465	0.00	0.00	3.47	2016
TACO PLASTICS	TACO PLASTICS:-Crankshaft	0.337	0.00	0.00	0.34	2022
TWYFORDS	TWYFORDS:-Church Lawton	1.299	0.00	0.64	0.66	2016
WESTON	WESTON:-CALMIC / L2646 (HASLINGTON)	9.764	6.51	0.00	3.25	2015
WESTON	WESTON:-WESTON VILLAGE / L12109 (WESTON)	14.941	0.00	0.00	14.94	2015
WESTON	WESTON:-LOCAL / L2630 BARTHOMLEY	6.334	0.00	0.00	6.33	2016
WHEELOCK	WHEELOCK:-Town Fields	0.441	0.00	0.00	0.44	2021
WINCHAM	WINCHAM:-Linnards Lane/Church Street	3.112	0.00	0.00	3.11	2017
WINCHAM	WINCHAM:-G R Concrete	3.767	0.00	0.00	3.77	2022
WINCHAM	WINCHAM:-BP NUTRITION	1.572	0.00	0.00	1.57	2022
WINWICK QUAY	WINWICK QUAY:-Birch Avenue LDU	3.459	0.00	0.44	3.02	2017
WOODFORD PARK	WOODFORD PARK:-COMPREHENSIVE SCHOOL	20.887	0.00	0.00	20.89	2022
WOOLSTON to SAFEWAY	WOOLSTON:-Grey Mist Avenue	0.762	0.76	0.00	0.00	2019
WRENBURY FRITH	WRENBURY FRITH:-Sandfield Estate / L76A	38.326	0.00	3.95	34.38	2015
WRENBURY FRITH	WRENBURY FRITH:-Dowse Green (L492)	29.049	0.00	3.95	25.10	2020
WRENBURY FRITH	WRENBURY FRITH:-Chorley / Faddiley / L12335	15.291	0.00	3.98	11.32	2022

132kV OHL Works



11kV OHL Works





33kV OHL Works

Circuit Name	OHL Length	Rebuild (km)	Refurbishment (km)	Production Year
ACTON to NANTWICH	2.12	0	2.12	2021
ANDERTON to LOSTOCK GRID	4.30	4.30	0	2018
CHURCH LAWTON to TWYFORDS	0.77	0	0.77	2021
CLEDFORD to GRAVEL	4.67	0	4.67	2016
CREWE GRID to DUCKINGTON	22.30	0	22.30	2019
CREWE GRID to ELWORTH GRID	7.54	7.54	0.00	2016
CREWE GRID to NANTWICH	2.83	0	2.83	2019
CREWE GRID to STAPELEY	3.49	0	3.49	2017
CREWE GRID to WISTASTON HALL	1.03	0	1.03	2015
DUCKINGTON to N W FARMERS	3.54	0	3.54	2022
DUCKINGTON to WHITCHURCH	12.63	0	12.63	2017
HARTFORD to WINSFORD GRID	6.20	0	6.20	2016
KNUTSFORD GRID to HOLMES CHAPEL	13.69	0	13.69	2019
KNUTSFORD GRID to LOSTOCK GRID	6.86	6.86	0	2015
LOSTOCK GRID to GADBROOK	2.40	0	2.40	2017
LOSTOCK GRID to MORRISONS	2.13	0	2.13	2021
LOSTOCK GRID to WINCHAM	0.81	0	0.81	2021
MARCHWIEL GRID to DUCKINGTON	10.76	0	10.76	2020
MIDDLEWICH to MORRISONS	6.77	0	6.77	2020
MIDPOINT POCHIN WAY to RHM FOODS LTD	0.83	0	0.83	2021
MOBBERLEY to KNUTSFORD GRID	2.01	0	2.01	2017
NEWHALL to WHITCHURCH GRID	9.81	0	9.81	2020
NORTHWICH TOWN to WINCHAM	0.37	0	0.37	2021
PRIMROSE HALL to FISONS	1.63	0	1.63	2021
RADWAY GREEN to COPPENHALL GRID	7.43	7.43	0	2015
RADWAY GREEN to ROF NO.1	0.11	0	0.11	2021
RADWAY GREEN to ROF NO.2	0.35	0	0.35	2021
RADWAY GREEN to WESTON	4.23	0	4.23	2018
RHM FOODS LTD to ELWORTH GRID	1.47	0	1.47	2021
SANDBACH to RADWAY GREEN	10.02	10.02	0	2022
SANDBACH to SMALLWOOD	6.85	0	6.85	2022
SMALLWOOD to CHURCH LAWTON	7.07	0	7.07	2016
STAPELEY to AUDLEM	7.58	0	7.58	2019
WHEELOCK to COPPENHALL GRID	2.75	0	2.75	2021
WISTASTON HALL to WESTON	2.89	0	2.89	2022
WRENBURY FRITH to WHITCHURCH GRID	7.60	0	7.60	2021

SP ENERGY NETWORKS

RIIO ED1 ZONE MAPPING

OPERATIONAL ZONE- GEOGRAPHICAL LAYOUT

CHESHIRE

33 kV DISTRIBUTION NETWORK

VERSION 1

27/03/2013

CREATED BY: MARIA ANZOLA

NETWORK DIAGRAM KEY

- Transformer (Non Load)
- Transformer (Load)
- Switchgear (Non Load)
- Substation (Load)
- Village Modernisation
- Switchboard (Load)
- Existing 33kV Network
- 33kV OHL Works
- New 33kV Circuit
- 132 kV Transformer Refurbishment
- 132kV Switchgear

Planned 132kV Work

132kV TRANSFORMER REFURBISHMENT	
1	Southport GT1 & GT2
2	Litherland GT1A & GT1B

132kV SWITCHGEAR	
3	Speke Swgr, GT1, GT3 & 33kV
4	Gateacre Swgr & GT1
5	Lister Drive Swgr, GT1, GT2
6	Rainhill Swgr

11kV OHL Works

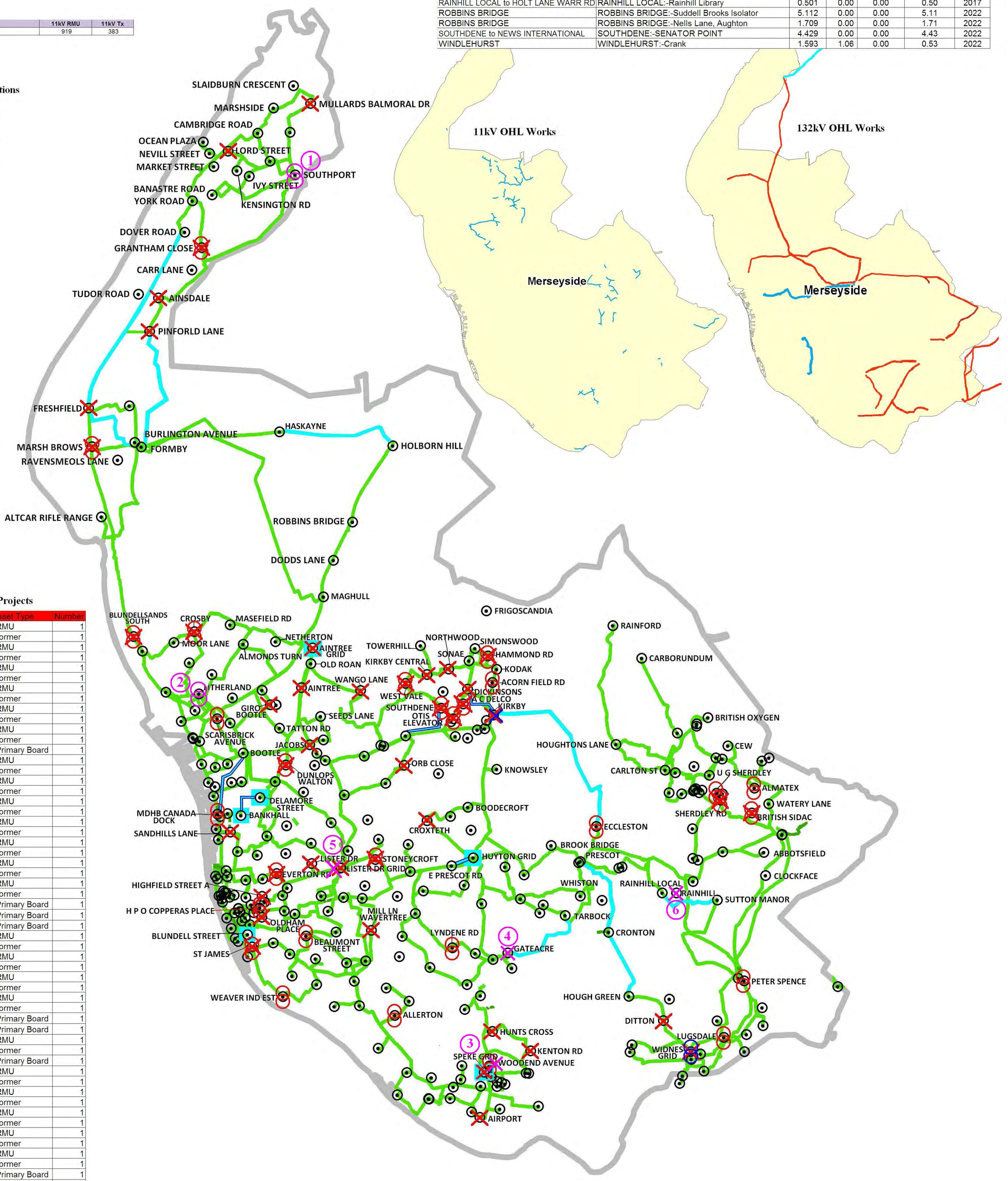
Primary Substation	Circuit Name	OHL Length (km)	REBUILD (km)	RECONDUCTOR (km)	REFURBISHMENT (km)	Production Year
AINSDALE to PINFOLD LANE	AINSDALE:-Liverpool Rd (South)	0.178	0.00	0.00	0.18	2017
ALDERWOOD AVE	ALDERWOOD AVE:-East Damwood Road	1.315	0.66	0.00	0.66	2017
E E EAST LANCS ROAD to ORB CLOSE	E E EAST LANCS ROAD:-Preesall Way	1.400	0.00	0.00	1.40	2017
ECCLESTON	ECCLESTON:-Burrows Lane	0.912	0.91	0.00	0.00	2022
ECCLESTON to BROOK BRIDGE	ECCLESTON:-Prescot Water Treatment	2.265	1.13	0.00	1.13	2017
HASKAYNE	HASKAYNE:-School Lane	8.243	8.24	0.00	0.00	2016
HILLS MOSS	HILLS MOSS:-Aldridge Drive Tee Lumber Ln O/H Dist	2.694	0.00	0.00	2.69	2022
HOLBORN HILL	HOLBORN HILL:-Small lane	4.393	0.00	0.00	4.39	2021
HOUGHTON LANE	HOUGHTON LANE:-Catchdale Moss / Royal Oak	6.629	0.00	0.00	6.63	2016
HOUGHTON LANE	HOUGHTON LANE:-Lester Drive	1.549	0.00	0.00	1.55	2021
MAGHULL	MAGHULL:-Liverpool Rd, South	7.110	0.00	0.00	7.11	2015
MARLED HEY to KNOWSLEY	MARLED HEY:-Roundhey	1.594	0.00	0.00	1.59	2016
MIDDLEMAS HEY to MIDDLEMAS HEY	MIDDLEMAS HEY:-Brittarge Brow	3.798	0.00	0.32	3.48	2016
N C B SUTTON MANOR	N C B SUTTON MANOR:-Wilmere Rd / Warrington Rd	0.874	0.87	0.00	0.00	2015
N C B SUTTON MANOR to CLOCKFACE	N C B SUTTON MANOR:-Pendlebury Street	1.723	0.00	0.00	1.72	2015
NETHERTON	NETHERTON:-Chapel Lane / St Catherines School	1.687	0.00	0.66	1.03	2019
RAINHILL LOCAL to HOLT LANE WARR RD	RAINHILL LOCAL:-Rainhill Library	0.501	0.00	0.00	0.50	2017
ROBBINS BRIDGE	ROBBINS BRIDGE:-Suddell Brooks Isolator	5.112	0.00	0.00	5.11	2022
ROBBINS BRIDGE	ROBBINS BRIDGE:-Nells Lane, Aughton	1.709	0.00	0.00	1.71	2022
SOUTHDENE to NEWS INTERNATIONAL	SOUTHDENE:-SENATOR POINT	4.429	0.00	0.00	4.43	2022
WINDLEHURST	WINDLEHURST:-Crank	1.593	1.06	0.00	0.53	2022

Additional Equipment

Zone	11kV NCB	11kV RMU	11kV Tx
Merseyside	87	919	383

Network Circuit Breaker Locations

Location	Number
AIGBURTH RD-011	4
BROUGHS GOODLASS RD.-011	4
BRUNT LANE-011	4
CHURCH RD HALEWOOD-011	4
CUERDLEY PUMPS-011	3
FAZAKERLEY HOSPITAL-011	2
FINCHAM ROAD-011	4
GREEN HEYS DRIVE-011	4
HALL LANE MAGHULL-011	4
KIRKBY NO. 4-011	4
LIME GROVE-011	3
LONGVIEW-011	5
MERSEYSIDE POLICE HQ-011	3
MILL LANE STOOPS-011	4
MILL LANE-011	4
PARK ROAD WEST-011	4
PRINCESS DRIVE SOUTH-011	4
RAILWAY STREET-011	3
SEFTON LANE-011	4
STOVES-011	3
TALCHEM KNOWSLEY EST-011	3
VERNONS PARK LANE-011	6
WALMESLEYS-011	3



Non-Load Related Primary Projects

Primary Substation	Asset Type	Number
A C DELCO-033	33kV RMU	1
	Transformer	1
ACORN FIELD ROAD-033	33kV RMU	1
	Transformer	1
ALLERTON-033	33kV RMU	1
	Transformer	1
ALMATEX-033	33kV RMU	1
	Transformer	1
BLUNDELLSANDS SOUTH-033	33kV RMU	1
	Transformer	1
BRITISH SIDAC-011	33kV RMU	1
	Transformer	1
	11kV Primary Board	1
CROSBY-033	33kV RMU	1
	Transformer	1
DUNLOPS WALTON-033	33kV RMU	1
	Transformer	1
ECCLESTON-033	33kV RMU	1
	Transformer	1
EVERTON ROAD-033	33kV RMU	1
	Transformer	1
GRANTHAM CLOSE-033	33kV RMU	1
	Transformer	1
H P O COPPERAS HILL-033	33kV RMU	1
	Transformer	1
HAMMOND ROAD-033	33kV RMU	1
	Transformer	1
HIGHFIELD STREET A-011	11kV Primary Board	1
HILLS MOSS-011	11kV Primary Board	1
LUGSDALE-011	11kV Primary Board	1
	33kV RMU	1
	Transformer	1
LYNDENE ROAD-033	33kV RMU	1
	Transformer	1
MARSH BROWS-033	33kV RMU	1
	Transformer	1
MDHB CANADA DOCK-033	33kV RMU	1
	Transformer	1
MILL LN WAVERTREE-011	11kV Primary Board	1
ORB CLOSE-011	11kV Primary Board	1
OTIS ELEVATOR-033	33kV RMU	1
	Transformer	1
SANDHILLS LANE-011	11kV Primary Board	1
SCARISBRICK AVENUE-033	33kV RMU	1
	Transformer	1
SHERDLEY ROAD-033	33kV RMU	1
	Transformer	1
SOUTHDENE-033	33kV RMU	1
	Transformer	1
ST JAMES-033	33kV RMU	1
	Transformer	1
STONEYCROFT-033	33kV RMU	1
	Transformer	1
WATERY LANE-011	11kV Primary Board	1
WEST VALE-033	33kV RMU	1
	Transformer	1

SP ENERGY NETWORKS

RIIO ED1 ZONE MAPPING

OPERATIONAL ZONE - GEOGRAPHICAL LAYOUT

MERSEYSIDE

DISTRIBUTION NETWORK

VERSION 2
21/06/2013

CREATED BY: ANTHONY DONOGHUE
MODIFIED BY: BRENDAN GALLOWAY

33kV OHL Works

CIRCUIT REF NO.	CIRCUIT NAME	OHL LENGTH (KM)	REBUILD (KM)	REFURB (KM)	YEAR
MW323341		3.1	0	3.1	
MW113184	PINFOLD LANE TO FORMBY GRID	3.07	0	3.07	2016
MW236322	RAINHILL LOCAL TO N C B SUTTON MANOR	0.32	0	0.32	2017
MW117118	HASKAYNE TO HOLBORN HILL	3.68	0	3.68	2018
MW191233	KIRKBY TO ECCLESTON	5.01	0	5.01	2019
MW23924	TARBOCK TO GATEACRE GRID	0.8	0	0.8	2019
MW23338	PRESCOT TO HOUGH GREEN	1.68	0	1.68	2021
MW114184	DOVER ROAD TO FORMBY GRID	3.47	0	3.47	2022
MW322341		3.1	0		

Load Related Primary Projects

PROJECT TITLE	SITE NAME	ASSET TYPE	NUMBER	JOB TYPE	YEAR
Aintree grid 33kV switchboard	AINTREE GRID	Switchboard	1	Replacement	
Blundell Street 33kVring main unit replacement	BLUNDELL STREET	Switchboard	1	Fault Level	
Bold-Prescot-Widnes Demand Group 33kV Reinforcement	WIDNES GRID	Grid Transformer	1	Reinforcement	
Bootle/Burlington Street/Lister Drive 33kV Reinforcement	DELAMORE STREET	Switchboard	1	Reinforcement	
	BANKHALL TO DELAMORE ST	Circuit	1	Reinforcement	
	BANKHALL	Switchboard	1	Reinforcement	
	MDHB CANADA DOCK	Circuit	1	Reinforcement	
Gateacre-Huyton-Kirby-Prescot fault level mitigations	HUYTON GRID	Switchboard	1	Fault Level	
	GATEACRE GRID	Switchboard	2	Fault Level	
Gateacre Huyton Prescot Kirkby Demand Group Reinforcement	HUYTON GRID TO EAST PRESCOT ROAD	Circuit	1	Reinforcement	
	HUYTON GRID	Switchboard	1	Reinforcement	
Kirkby-Gillmoss-Simonswood Demand Group 33kV Reinforcement	KIRKBY GRID	Switchgear	1	Reinforcement	
	KIRKBY CENTRAL TO DICKENSONS	Circuit	1	Reinforcement	
	SOUTHDENE TO GILLMOSS	Circuit	1	Reinforcement	
Speke grid 33kV Switchboard	SPEKE GRID	Switchboard	1	Replacement	

NETWORK DIAGRAM KEY

- Transformer (Non Load)
- Transformer (Load)
- Switchgear (Non Load)
- Substation (Load)
- Village Modernisation
- Switchboard (Load)
- Existing 33kV Network
- 33kV OHL Works
- New 33kV Circuit
- 132 kV Transformer Refurbishment
- 132kV Switchgear

Planned 132kV Works

132kV TRANSFORMER REFURBISHMENT	
1	Aberystwyth GT1 & 33kV
2	Newtown GT2

Load Related Primary Projects

Project Title	Site Name	Asset Type	Job Type	Number
Fairbourne 33/11kV Reinforcement	Fairbourne	Primary Transformer	Reinforcement	1
Forden 33/11kV Reinforcement	Forden	Primary Transformer	Reinforcement	1
Llanidloes 33/11kV Reinforcement	Llanidloes	Primary Transformer	Reinforcement	2
Llanilar 33/11kV Reinforcement	Llanilar	Primary Transformer	Reinforcement	1
Llanilar 33/11kV Reinforcement	Llanilar	Switchgear	Reinforcement	1
Llanilar 33/11kV Reinforcement	Llanilar	Switchgear	Reinforcement	1
Llanilar 33/11kV Reinforcement	Llanilar	Switchroom	Reinforcement	1
Mid Wales – Bryn Blaen 27MW & Mynyyd Y Gwynt Connection	NGET Mid Wales	Circuit	Connection	1
Mid Wales – Bryn Blaen 27MW & Mynyyd Y Gwynt Connection	Bryn Blaen to Mynyyd Y Gwynt	Circuit	Connection	1
Mid Wales – Bryn Blaen 27MW & Mynyyd Y Gwynt Connection	Bryn Blaen	Circuit	Connection	1
Mid Wales – Bryn Blaen 27MW & Mynyyd Y Gwynt Connection	NGET Mid Wales	Substation	Connection	1
Mid Wales – Bryn Blaen 27MW & Mynyyd Y Gwynt Connection	Mynyyd Y Gwynt	Substation	Connection	1
Mid Wales - Reinforcement	Between Ffridd and the Carno T	Substation	Reinforcement	1
Mid Wales - Reinforcement	MB line to Mid Wales hub	Circuit	Reinforcement	1

Non-Load Related Primary Projects

Primary Substation	Asset	Number
ABERDYFI-011	11kV Primary Board	1
ABERDYFI-033	33kV CB	5
ABERYSTWYTH -011	11kV Primary Board	1
ABERYSTWYTH -033	Transformer	2
ABERYSTWYTH -033	33kV CB	10
BARMOUTH-033	Transformer	1
BOW STREET-011	11kV Primary Board	1
BOW STREET-033	33kV CB	3
DOLGELLAU-033	Transformer	1
FAIRBOURNE-033	Transformer	1
FORDEN-033	Transformer	1
MACHYNLLETH-033	Transformer	1
Milford-011	11kV Primary Board	1
MILFORD-033	33kV CB	2
MOCHDRE-011	11kV Primary Board	2
MOCHDRE -033	Transformer	1
	33kV CB	2
RAVEN SQUARE-011	11kV Primary Board	1
U C Wales-011	11kV Primary Board	1
WELSHPOOL-033	33kV CB	5

33kV OHL Works

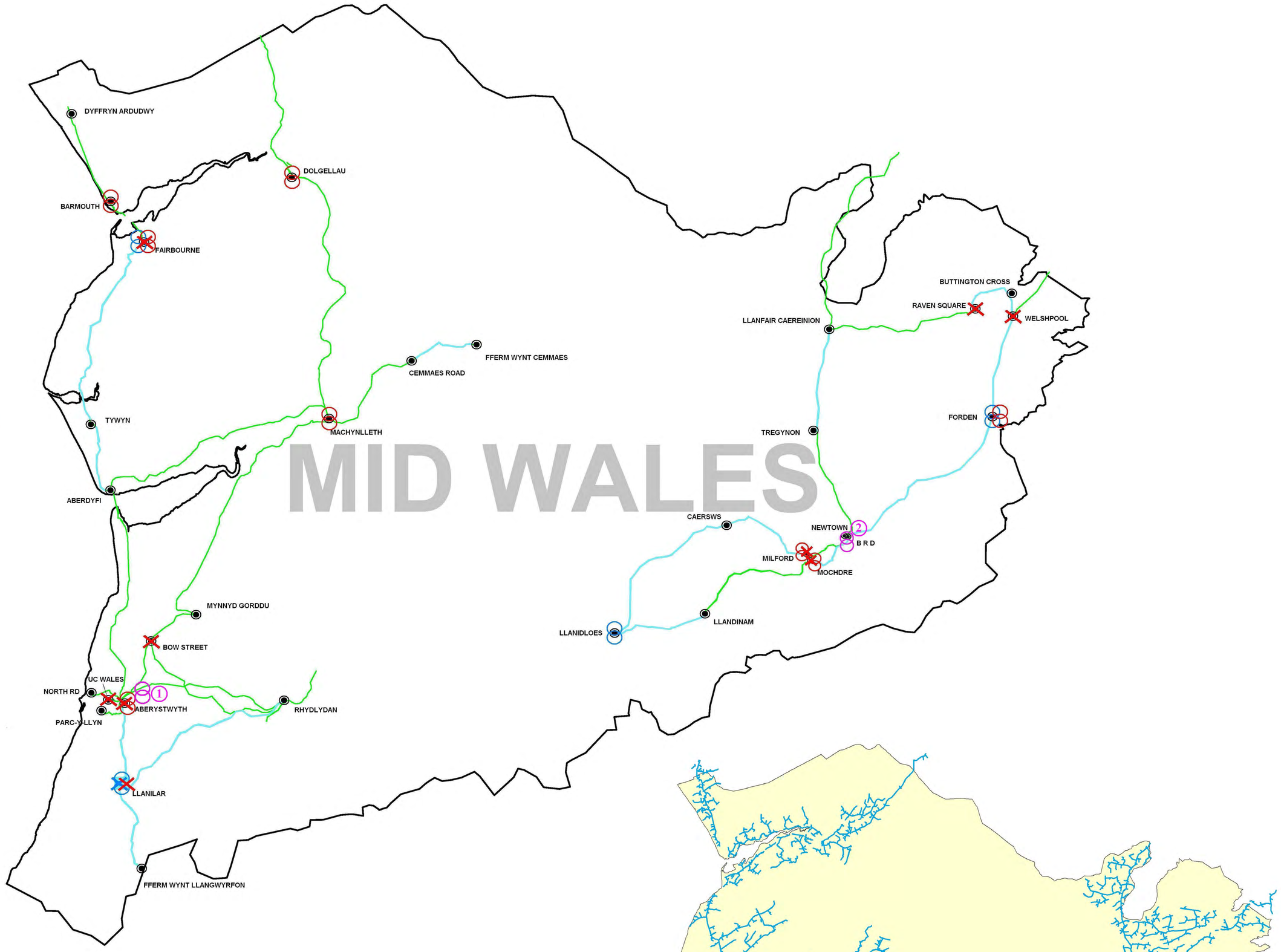
Circuit Name	OHL Length (km)	Number of poles	Rebuild (km)	Refurbishment (km)	Production Year
ABERYSTWYTH to LLANILAR	5.69	72	0	5.69	2021
CAERSWS to MILFORD	6.59	66	0	6.59	2021
CEMMAES ROAD to FFERM WYNT CEMMAES	4.95	53	0	4.95	2020
DOLGELLAU to DYFFRYN ARDUDWY	5.95	66	5.95	0	2016
FORDEN to NEWTOWN GRID	13.88	147	0	13.88	2020
LLANFAIR CAEREINION to TREGYNON	7.05	161	7.05	0	2015
LLANIDLOES to CAERSWS	12.38	127	0	12.38	2017
LLANIDLOES to LLANDINAM	6.04	65	6.04	0	2015
LLANILAR to FFERM WYNT LLANGWYRYFON	6.22	65	0	6.22	2022
NEWTOWN GRID to MOCHDRE	3.59	38	0	3.59	2017
RAVEN SQUARE to BUTTINGTON CROSS	3.65	39	0	3.65	2022
RHYDLYDAN to LLANILAR	14.17	169	0	14.17	2016
TYWYN to ABERDYFI	4.25	52	4.25	0	2015
TYWYN to FAIRBOURNE	14.57	167	14.57	0	2015
WELSHPOOL to BUTTINGTON CROSS	1.73	19	0	1.73	2020
WELSHPOOL to FORDEN	7.43	76	0	7.43	2020

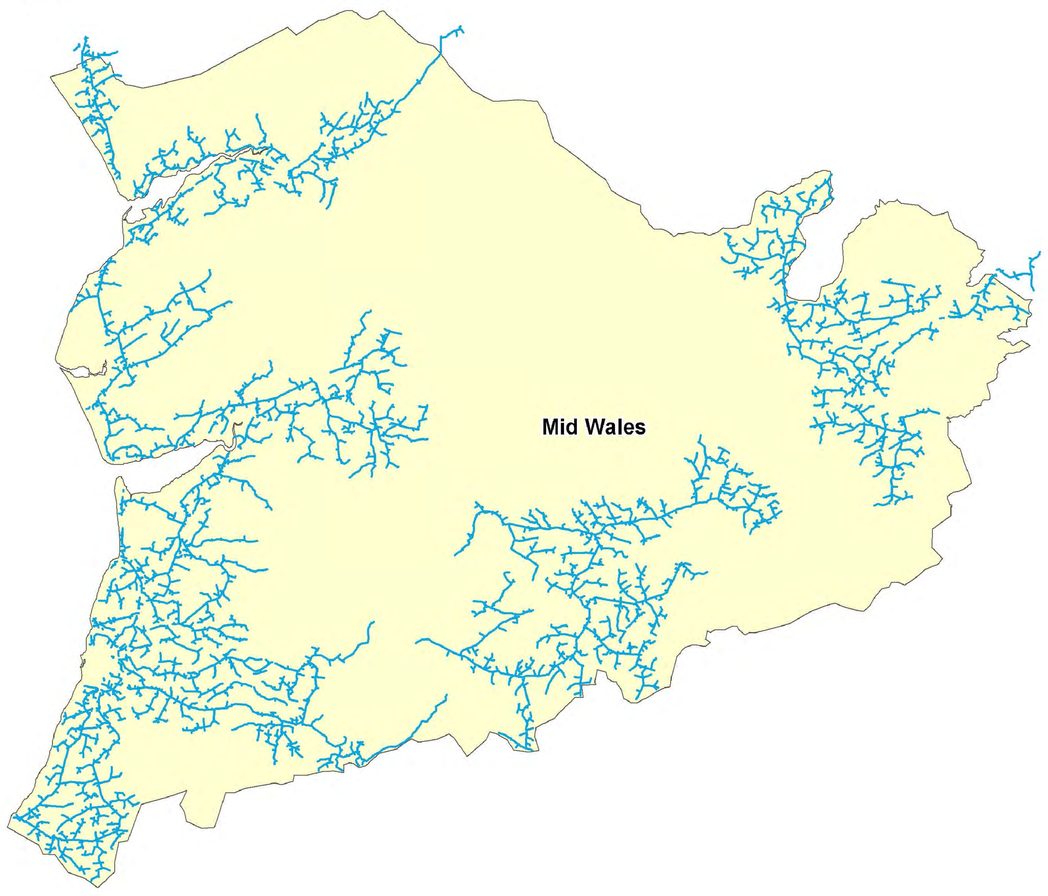
Additional Equipment

11 kV NCBs	11 kV RMUs	11 kV Transformers
0	52	21

11kV OHL Works

Primary Substation	Circuit Name	OHL Length (km)	REBUILD (km)	RECONDUCTOR (km)	REFURBISHMENT (km)	Production Year
ABERDYFI	ABERDYFI-YNYSLAS	6.396	0.00	0.00	6.40	2017
ABERDYFI	ABERDYFI-MACHYNLLETH L9231	22.391	0.00	0.00	22.39	2018
ABERDYFI	ABERDYFI-TYWYN L589	14.818	0.00	1.72	13.09	2021
ABERYSTWYTH	ABERYSTWYTH-L595 Bow Street / Penrhyncoch	9.720	0.00	0.00	9.72	2022
ABERYSTWYTH	ABERYSTWYTH-Manweb Depot	38.506	13.83	0.00	24.68	2018
ABERYSTWYTH	ABERYSTWYTH-L3432 Goginan / Ponterwyd	29.466	7.94	0.00	21.52	2020
ABERYSTWYTH-Glyn CCT 6/6/01802 Part o Llyn MS data wrong)	ABERYSTWYTH-L6826 Glanyrafon Substation	1.180	1.18	0.00	0.00	2022
BARMOUTH	BARMOUTH-North Avenue L6759	16.442	0.00	0.00	16.44	2015
BARMOUTH	BARMOUTH-Barmouth Sewage Works L60	11.710	0.00	0.21	11.50	2021
BOW STREET	BOW STREET-MAES YR EFAIL/GLANSIEUI	10.552	0.00	0.00	10.55	2016
BOW STREET	BOW STREET-L415 RHYDYPENNAU SCHOOL	9.060	0.00	0.00	9.06	2017
BOW STREET	BOW STREET-L3407 M/S1032 MAESNEWYDD	40.347	0.00	0.00	40.35	2019
BOW STREET	BOW STREET-BRYN OWEN CAMP	21.727	0.00	0.00	21.73	2020
BOW STREET	BOW STREET-L0458 M/S1030 GARTH UCHAF	44.833	13.43	0.00	31.40	2015
CAERSWS	CAERSWS-NEWTOWN L 5163 (CM241)	50.555	8.28	0.00	42.27	2020
CAERSWS	CAERSWS-TREFECLWYS L 6622 (CM243)	31.700	6.76	0.00	24.94	2021
CEMMAES ROAD	CEMMAES ROAD -Machynlleth CM1330	35.393	6.44	0.00	28.95	2018
DOLGELLAU	DOLGELLAU-RHYDYMAIN L445	66.551	24.67	0.27	41.61	2015
DOLGELLAU	DOLGELLAU-BARMOUTH L6647 / BRYN MARION	21.330	9.57	0.00	11.76	2017
DOLGELLAU	DOLGELLAU-FAIRBOURNE L61	25.141	5.66	0.00	19.48	2021
DYFFRYN ARDUDWY	DYFFRYN ARDUDWY-NEWPORT PLANT L10/0379	22.104	0.00	0.00	22.10	2018
DYFFRYN ARDUDWY	DYFFRYN ARDUDWY-BENNAR FAWR LZ71	8.054	5.37	0.00	2.68	2021
FAIRBOURNE	FAIRBOURNE-Fairbourne Village B	3.626	0.00	0.00	3.63	2017
FAIRBOURNE	FAIRBOURNE-L1022 Mur Neudd	42.020	0.00	0.00	42.02	2017
FAIRBOURNE	FAIRBOURNE-Dolgellau	12.098	0.00	0.00	12.10	2019
FORDEN	FORDEN-Abermule / Line D173 (CM223)	62.389	13.25	0.63	48.51	2016
LLANFAIR CAEREINION	LLANFAIR CAEREINION-LLANFYLLIN (CM174)	63.595	13.06	0.00	50.54	2017
LLANFAIR CAEREINION	LLANFAIR CAEREINION-FORDEN (CM172)	51.265	10.79	0.00	40.48	2020
LLANFAIR CAEREINION	LLANFAIR CAEREINION-WELSHPOOL (CM171)	13.581	4.97	0.00	8.61	2022
LLANIDLOES	LLANIDLOES-Llangurig L09/1075 (CM232)	117.841	18.64	0.00	99.20	2016
LLANIDLOES	LLANIDLOES-Llandinam L184 (CM231)	42.930	8.86	0.00	34.07	2019
LLANIDLOES	LLANIDLOES-Trefeglwys L909 (CM235)	72.852	21.41	0.00	51.44	2022
LLANILAR	LLANILAR-Llanddeiniol	57.470	0.00	0.00	57.47	2020
LLANILAR	LLANILAR-Rhydyfelin	11.723	7.82	0.00	3.91	2022
MACHYNLLETH	MACHYNLLETH-EGLWYS FACH BOW STREET	53.860	13.89	0.00	39.97	2018
MACHYNLLETH	MACHYNLLETH-PENNAL ABERDYFI	25.544	8.92	0.10	16.52	2018
MACHYNLLETH	MACHYNLLETH-PENEGOES-CEMMAES RD L7891	48.779	9.40	0.26	39.12	2021
PARC-Y-LLYN 33	PARC-Y-LLYN 33-Gaerffynon	0.140	0.14	0.00	0.00	2021
PARC-Y-LLYN 33	PARC-Y-LLYN 33-Gauging Station	10.488	0.00	0.00	10.49	2022
PARC-Y-LLYN 33 (Data CCT 6/6/000805 Aberystwyth AS Data Wrong)	PARC-Y-LLYN 33-MAES CRUGIAU	59.358	0.00	0.09	59.27	2021
RAVEN SQUARE	RAVEN SQUARE-Oldford Rise (CM204)	6.450	0.00	0.00	6.45	2020
RAVEN SQUARE	RAVEN SQUARE-Llanerchyddol/Llanfair Caer.ion CM203	38.101	6.83	0.00	31.27	2019
RHYDLYDAN	RHYDLYDAN-Llanilar	80.161	18.10	0.00	62.06	2015
RHYDLYDAN	RHYDLYDAN-Aberystwyth	13.867	5.20	0.00	8.66	2021
TYWYN	TYWYN-Ffordd Cadfan	2.550	1.70	0.00	0.85	2017
TYWYN	TYWYN-Groesffordd / Abergynolwyn	50.148	0.00	0.00	50.15	2019
U C WALES	U C WALES-Penglais School L1984	8.303	0.00	0.00	8.30	2022
U C WALES to PARC-Y-LLYN 33	U C WALES-Padarn Crescent	0.087	0.00	0.00	0.09	2021
WELSHPOOL	WELSHPOOL-Henfaes Road L262 (CM214)	1.014	0.00	0.00	1.01	2021
WELSHPOOL	WELSHPOOL-Buttington L1791 (CM211)	23.538	0.00	0.00	23.54	2022
WELSHPOOL	WELSHPOOL-CAREHOME:ROBERTSON L7452 (CM215)	1.566	0.00	0.00	1.57	2022
WELSHPOOL	WELSHPOOL-Prince of Wales Drive (CM213)	0.874	0.87	0.00	0.87	2022





SP ENERGY NETWORKS

RIIO ED1 ZONE MAPPING

OPERATIONAL ZONE - GEOGRAPHICAL LAYOUT

MID WALES

DISTRIBUTION NETWORK

VERSION 2
19/06/2013

CREATED BY: MARIA ANZOLA
MODIFIED BY:BRENDAN GALLOWAY

NETWORK DIAGRAM KEY

- Transformer (Non Load)
- Transformer (Load)
- Switchgear (Non Load)
- Substation (Load)
- Village Modernisation
- Switchboard (Load)
- Existing 33kV Network
- 33kV OHL Works
- New 33kV Circuit
- 132 kV Transformer Refurbishment
- 132kV Switchgear

Further Information

Zone	11kV NCB	11kV RMU	11kV Tx
North Wales	3	240	101

NCB Location — Ivy Street-011

Planned 132kV Works

132kV TRANSFORMER REFURBISHMENT	
1	Rhyl GT1 & 33kV Swgr
2	Colwyn Bay GT1

Load Related Primary Projects

PROJECT TITLE	SITE NAME	ASSET TYPE	NUMBER	JOB TYPE	YEAR
Anglesey 33kV Reinforcement	Llanfair PG	Grid Transformer	1	Reinforcement	
Parc Bryn Cegin - 33kV Reinforcement/Bangor-Caernarfon Reinforcement	Bangor Hospital to Minffordd	Circuit	1	Reinforcement	
Abergele – Pensarn group 33/11kV Reinforcement	Pensarn (New industrial park)	Substation	1	Reinforcement	
Beaumaris 33/11kV Reinforcement	Llandegfan to Beaumaris	Circuit	1	Reinforcement	
	Llandegfan	Switchgear	1	Reinforcement	
	Beaumaris	Primary Transformer	1	Reinforcement	
		Switchgear	1	Reinforcement	
		Switchboard	1	Reinforcement	
		Switchroom	1	Reinforcement	
	Graig Fawr	Primary Transformer	1	Reinforcement	
Llandyfrydog 33/11kV Reinforcement	Llandyfrydog	Primary Transformer	1	Reinforcement	
	Llandyrnog	Primary Transformer	1	Reinforcement	
Pen-y-Groes 33/11kV Reinforcement	Pen-y-Groes	Primary Transformer	1	Reinforcement	

11kV OHL Works

Circuit Name	Circuit Name	OHL Length (km)	Rebuild (km)	Refurb (km)	Year
ABERGELE	ABERGELE - Rhyl Fuse (33/11kV)	4.595	4.59	0.00	2015
ABERGELE to PENSARN	ABERGELE - Bridge Street (33/11kV)	2.564	2.56	0.00	2015
ABERGWYN	ABERGWYN - ABERGWYN	4.976	0.00	4.93	2016
ABERGWYN	ABERGWYN - Gwynfryn	1.900	0.00	1.90	2016
ABERGWYN	ABERGWYN - Rock Cottage (ABERGWYN	8.962	0.00	8.96	2016
ALPOOD	ALPOOD - Pont Llanrhaeadr	8.509	0.00	8.50	2021
ALPOOD	ALPOOD - Tower Hill(ALPOOD)	1.000	0.00	1.00	2021
ANGLESEY	ANGLESEY - Llangefni - Llandrillo-yn-Rhos	13.870	0.00	13.87	2016
ARFRON	ARFRON - Llanrug	11.565	0.00	11.56	2018
BANGOR HOSPITAL	BANGOR HOSPITAL - Glyn Lane / Llanfairpwll (Pall Mall	3.955	0.00	3.95	2022
BANGOR HOSPITAL	BANGOR HOSPITAL - TREGOCHAN (BEDD	6.409	6.41	0.00	2022
BEAUMARIS	BEAUMARIS - Llandegfan (33/11kV)	11.200	11.20	0.00	2022
BEAUMARIS	BEAUMARIS - Llanfaes / Penrhos	11.200	0.00	11.20	2022
BEAUMARIS	BEAUMARIS - Llanfaglan Ltd	7.800	0.00	7.80	2022
BETHESDA	BETHESDA - Llandygai (33/11kV)	11.200	0.00	11.20	2022
BETHESDA	BETHESDA - Pen Llwyn Ffridd(33/11kV)	5.596	0.00	5.60	2022
BETHESDA	BETHESDA - PENTIR(33/11kV)BEBS	6.478	3.76	0.00	2022
BETWS-Y-COE	BETWS-Y-COE - Betws-y-Coed (33/11)	12.343	0.00	12.34	2022
BLAENAU FFESTINIOG	BLAENAU FFESTINIOG - Maentwrog (33/11kV)	7.000	0.00	7.00	2022
BLAENAU FFESTINIOG	BLAENAU FFESTINIOG - Hafan - G.E.E.B. Pump Storage	2.000	0.00	2.00	2022
BOTWNNOG	BOTWNNOG - Aberdaron - Llanbedrog	17.200	0.00	17.20	2022
BOTWNNOG	BOTWNNOG - Hell's Mouth - Abersoch	22.000	0.00	22.00	2015
BOTWNNOG	BOTWNNOG - Llanbedrog - Aberdaron	11.000	0.00	11.00	2015
BOTWNNOG	BOTWNNOG - Sarn - Edern	7.113	0.00	7.11	2015
BOTWNNOG	BOTWNNOG - Llaneirch - Edern	3.310	0.31	3.10	2020
BOTWNNOG	BOTWNNOG - Edern - Llanbedrog	11.000	0.00	11.00	2020
BUTLINS	BUTLINS - Penrhyn - Rhuddlan	3.977	0.00	4.00	2022
BUTLINS	BUTLINS - Bromhall - Prestatyn	1.010	0.00	1.01	2022
CAERGEILIOG	CAERGEILIOG - Trearddur Bay - Holyhead	21.000	0.00	21.00	2022
CAERGEILIOG	CAERGEILIOG - Gwalchmai - Llanfaethlu	20.044	0.00	20.04	2016
CAERGEILIOG	CAERGEILIOG - Rhoscolyn - Valley	11.000	0.00	11.00	2016
CAERGEILIOG	CAERGEILIOG - Llanfechell - Carmel Bay	41.900	0.00	41.90	2016
CAERGEILIOG	CAERGEILIOG - Rhoscefnni / Llanddeusant	9.306	9.09	0.00	2021
CAERGEILIOG	CAERGEILIOG - Four Mile Bridge / Penrhos	4.000	0.00	4.00	2021
CARMEL	CARMEL - Gorsedd	1.503	1.51	0.00	2022
CARMEL	CARMEL - Penycreiddi / Llanfyllin	13.631	2.16	11.08	2022
CARMEL	CARMEL - Llanfyllin / Llanfair	1.900	0.00	1.90	2022
CEMAES BAY	CEMAES BAY - Carn Ladron / Amlwch / Amlwch	11.000	0.00	11.00	2022
CEMAES BAY	CEMAES BAY - Cemaes / Llanbadrig	16.479	0.00	16.48	2022
CLYNNOG BAY	CLYNNOG BAY - QUINTON HALL - (BOOSTHOUSE PUMPING STATION)	1.913	0.00	1.91	2022
CONWY	CONWY - Dolgarrog - Penmaenmawr (CW234)	17.300	0.00	17.30	2019
CONWY	CONWY - Llanrwst - Dolgarrog	11.000	0.00	11.00	2019
CONWY	CONWY - Tyn-y-Groes - Llanrwst	1.800	0.00	1.80	2019
CYFFIN ROAD	CYFFIN ROAD - Lon Gaffer Distributor	1.900	0.00	1.90	2022
DEGANWY	DEGANWY - Llandudno	11.000	0.00	11.00	2022
DEIRIO	DEIRIO - Tubrodog / Blaenau	20.500	0.00	20.50	2022
DEIRIO	DEIRIO - Tubrodog / Blaenau	20.500	0.00	20.50	2022
DEIRIO ELECTRIC	DEIRIO ELECTRIC - Rd / Ffestiniog	1.900	0.00	1.90	2022
DEIRIO ELECTRIC	DEIRIO ELECTRIC - Glascoed Rd / Ffestiniog	1.900	0.00	1.90	2022
EDERN	EDERN - Llithfaen	6.000	0.00	6.00	2022
FOUR CROSSES	FOUR CROSSES to PENBRYN ROAD	6.400	0.00	6.40	2022
FOUR CROSSES	FOUR CROSSES - Trefor	42.079	0.00	42.07	2019
FOUR CROSSES	FOUR CROSSES - Bodfuan	5.000	0.00	5.00	2019
FOUR CROSSES	FOUR CROSSES - Llangybi / Rhostyr	13.000	4.00	7.00	2019
GRAIG FAWR	GRAIG FAWR - Maes Hendre - Rhydorchard Avenue	1.937	0.00	1.94	2015
GRAIG FAWR	GRAIG FAWR - Rhuddlan - Rhyl	1.900	0.00	1.90	2015
GREENFIELD	GREENFIELD - PANNAL(HOLWAY) (7594)	3.789	0.00	3.79	2019
GREENFIELD	GREENFIELD - CHARLTON - HEADLEY	1.405	1.40	0.00	2019
GREENFIELD	GREENFIELD - Holway (7594)	1.900	0.00	1.90	2019
HANLECH	HANLECH - HANLECH TOWN	12.700	0.00	12.70	2016
HANLECH	HANLECH - Talsarnau	5.750	0.00	5.75	2016
HANLECH	HANLECH - Talsarnau Feeder	14.400	0.00	14.40	2016
HIRAEL to MINFFORDD	HIRAEL - Ambrose St	13.344	0.00	13.34	2016
HOLYHEAD	HOLYHEAD - Holyhead (33/11kV) (5911)	11.200	0.00	11.20	2022
LLANDDONA	LLANDDONA - South Beach / Menai Bridge	16.200	0.00	16.20	2016
LLANDDONA	LLANDDONA - Pont Hafa	9.248	0.00	9.25	2016
LLANFAIRFAB	LLANFAIRFAB - Trefnant	10.100	0.00	10.10	2022
LLANFAIRFAB	LLANFAIRFAB - Llanfair - Abergwyn	10.100	0.00	10.10	2022
LLANFAIRFAB	LLANFAIRFAB - Bettyhog / Edeirnion	10.100	0.00	10.10	2022
LLANBERIS	LLANBERIS - Royal Victoria	3.700	3.70	0.00	2017
LLANBERIS	LLANBERIS - Llanrug - Llanberis	9.300	0.00	9.30	2017
LLANDEGFAN	LLANDEGFAN - Llandegfan - Llanfairpwll / Llanddeusant	11.200	0.00	11.20	2022
LLANDEGFAN	LLANDEGFAN - L1002 (Llanor/Llynnwll)	16.700	0.00	16.70	2022
LLANDEGFAN	LLANDEGFAN - L3002 Alaw Reservoir	36.300	0.00	36.30	2022
LLANDEGFAN	LLANDEGFAN - L3003 Llyn Alaw	16.700	0.00	16.70	2022
LLANDEGFAN	LLANDEGFAN - Mill Lodge / Beaumaris	10.561	0.00	10.56	2022
LLANDEGFAN	LLANDEGFAN - Cross Hill / Menai Bridge	3.148	0.00	3.15	2022
LLANDEGFAN	LLANDEGFAN - Pedair Ffordd / Llanfair PG	10.123	0.00	10.12	2022
LLANDEGFAN	LLANDEGFAN - Llandegfan	1.900	0.00	1.90	2022
LLANDEGFAN JUNCTION	LLANDEGFAN JUNCTION - Bush Corner	3.045	0.00	3.05	2017
LLANDYRNOG	LLANDYRNOG - CLEASEWELL FM	8.970	0.00	8.97	2016
LLANDYRNOG	LLANDYRNOG - LLANDYRNOG (COUNCILHEREHAYED	49.321	0.00	39.17	2016
LLANDYRNOG	LLANDYRNOG - LLANDYRNOG (PENTRE	10.000	0.00	10.00	2016
LLANFAELOG	LLANFAELOG - Rhosmeirch - Llangwyllog	8.800	0.00	8.80	2016
LLANFAELOG	LLANFAELOG - Ty Croes - Aberffraw	19.757	0.00	19.43	2016
LLANFAELOG	LLANFAELOG - Engedi - Llan Office	21.000	0.00	21.00	2016
LLANFAELOG	LLANFAELOG - Llangwyllog - Rhosmeirch	21.000	0.00	21.00	2016
LLANFAELOG	LLANFAELOG - Llangwyllog - Engedi	17.200	0.00	17.20	2022
LLANFAIR PG	LLANFAIR PG - Pentrefelin - Star	7.913	0.00	7.91	2016
LLANFAIR PG	LLANFAIR PG - Pentrefelin - Star	23.077	0.00	23.08	2021
LLANFAIR PG	LLANFAIR PG - Star - Llanfair PG	2.000	0.00	2.00	2021
LLANFAIRYNEUBWLL	LLANFAIRYNEUBWLL - Parc-y-Bedol / Pantbur Deudraeth	7.213	0.00	7.21	2022
LLANFROTHEN	LLANFROTHEN - Beddgelert	4.931	0.00	4.93	2022
LLANFROTHEN	LLANFROTHEN - Penrhyndeudraeth - Portmadog	7.200	0.00	7.20	2022
LLANGEFNI	LLANGEFNI - Pull Glas	11.200	0.00	11.20	2022
LLANGEFNI	LLANGEFNI - Dingoleng / Dervan	47.000	1.19	1.10	2022
LLANGEFNI	LLANGEFNI - Bont Uchaf / Dyffryn	21.000	0.00	21.00	2022
LLANGEFNI	LLANGEFNI - Llangefni / Llanerchymedd	21.000	0.00	21.00	2022
LLANGEFNI	LLANGEFNI - Llaethdy / Llanfaelog	20.700	0.00	20.70	2016
LLANGEFNI	LLANGEFNI - Pandorgoch	20.700	0.00	20.70	2016
LLANGEFNI	LLANGEFNI - Brynsiencyn / Pwll Mawrddi	48.347	0.00	48.35	2017
LLANGEFNI	LLANGEFNI - Star	21.000	0.00	21.00	2017
LLANGEFNI	LLANGEFNI - Llanfaelog Rd	21.000	0.00	21.00	2017
LLANGEFNI RD EST	LLANGEFNI RD EST - Llangefni L167	42.000	0.00	42.00	2022
LLANGEFNI RD EST	LLANGEFNI RD EST - PORTER'S AUK (340 kV)	5.200	0.00	5.20	2022
LLANGEFNI RD EST	LLANGEFNI RD EST - Llanerchymedd L114	9.000	0.00	9.00	2022
LLANGWNADL	LLANGWNADL - Llangwnadl	48.700	14.11	34.59	2016
LLANGWNADL	LLANGWNADL - St Anag's	37.200	10.33	26.87	2016
LLANGWNADL	LLANGWNADL - Penllech	28.900	9.97	20.93	2021
LLANGYBI ROAD	LLANGYBI ROAD - Llangybi - Tan-y-Bwlch Road	1.900	0.00	1.90	2022
MANOD	MANOD - Llyn-y-Fran - Bethania	7.500	0.00	7.50	2019
MANOD	MANOD - Dolwen - Blaenau Plastics	6.857	3.15	3.91	2022
MARFORD	MARFORD - Marford Quarry	1.900	0.00	1.90	2016
MARFORD	MARFORD - Wrexham Industrial Est (11.5kV) Rd	3.913	0.00	3.91	2016
MARFORD	MARFORD - Gresford - Sun Inn	10.568	3.92	6.65	2016
OLDEN	OLDEN - Bodfari Rd (OLDEN)	26.000	0.00	26.00	2022
OLDEN	OLDEN - Bodfari Rd (OLDEN)	11.400	0.00	11.40	2022
OLD MILL SIDINGS (MAY to LLYSFAEN ROAD	OLD MILL SIDINGS - PENRHOS ESTATE	1.900	0.00	1.90	2022
PARC CYBI	PARC CYBI - Parc Cybi - Valley (33)	1.000	0.00	1.00	2017
PEBLIC MILLS	PEBLIC MILLS - Bangor - Glan Dena (CW552)	0.000	0.01	0.00	2017
PENMAENMAWR	PENMAENMAWR - Penmaenmawr Park	1.900	0.00	1.90	2022
PENSARN	PENSARN - Rhyl Harbour	4.256	0.00	5.00	2019
PENTRAETH	PENTRAETH - Tynygongl - Benllech (33/11	9.300	0.00	9.30	2015
PENTRAETH	PENTRAETH - Pentraeth / Dingle - Benllech (33/11	4.100	0.00	4.10	2015
PENTRAETH	PENTRAETH - Benllech - Benllech (33/11	7.100	0.00	7.10	2015
PENTRAETH	PENTRAETH - Red Wharf Bay - Benllech (33/11	16.548	0.00	16.55	2020
PENTRAETH	PENTRAETH - Penn - Llangefni (33/11	28.951	0.00	28.95	2022
PENTRAETH	PENTRAETH - Pentraeth - Llanfair PG (33/11	16.000	0.00	16.00	2022

11kV OHL Works

Circuit Name	Circuit Name	OHL Length (km)	Rebuild (km)	Refurb (km)	Year
PLAS POOL	PLAS POOL - Llanfair PG - Llanfair Tpll	1.900	0.00	1.90	2022
PLAS POOL to ST ASAPH BUS PARK	PLAS POOL - The Lithalan / Eye	3.200	0.00	3.20	2022
PORTHMADOG	PORTHMADOG - LLANFROTHEN(saint GWYNNO	16.218	0.00	16.24	2022
PRESTATYN	PRESTATYN - Dyserth - Clwyd Tce	11.200	0.00	11.20	2022
PWLLHELI	PWLLHELI - Glan Y Don - Botiros	5.000	0.00	5.00	2022
PWLLHELI	PWLLHELI - Llanbedrog - Edern	11.000	0.00	11.00	2022
RHUDDLAN	RHUDDLAN - Church Street	1.900	0.00	1.90	2022
RHYLSEA(W)	RHYLSEA(W) - Pleasant View Camp	4.781	3.12	1.66	2017
RHYLSEA(W)	RHYLSEA(W) - Rhyl Harbour Sidings	4.781	3.12	1.66	2017
RHYL Y FOEL	RHYL Y FOEL - LLANDULAS-LLANDPEL	4.541	4.54	0.00	2022
RHYL1	RHYL1 - Lowerhaven / Four Crosses	11.100	6.91	16.35	2017
RHYL1	RHYL1 - Rhyl Harbour	1.900	0.00	1.90	2017
RUTHIN to LLANFWROG	RUTHIN - LLYN FARCHIE SIDING	1.000	0.00	1.00	2016
RUTHIN to LLANFWROG	RUTHIN - Grammar School	2.300	0.00	1.45	2016
ST ASAPH BUS PARK	ST ASAPH BUS PARK - CALL CENTRE	4.200	0.00	4.20	2022
WESTBOURNE AVENUE	WESTBOURNE AVENUE - Kinmel Meadons / Dinorl Bank	9.740	0.00	9.74	2017

Non-Load Related Primary Projects

Primary Substation	Asset Type	Number
BANGOR HOSPITAL-033	33kV CB	2
BETHESDA	33kV CB	2
BETWS-Y-COE	Transformer	1
BLAENAU FFESTINIOG	Transformer	1
BOTWNNOG	Transformer	1
CAERGEILIOG -033	33kV CB	1
CAERGEILIOG GRID-033	33kV CB	12
CAERNARFON	Transformer	1
	33kV CB	9
CONWY-033	33kV CB	2
FERODDO-033	Transformer	1
FOUR CROSSES-033	Transformer	1
	33kV CB	1
GRAIG FAWR-033	33kV CB	2
GREENFIELD-033	Transformer	1
HIRAEL-033	Transformer	1
HOLYHEAD-033	Transformer	1
LLANBEDROG-033	Transformer	1
LLANDDEUSANT-033	33kV CB	2
LLANDYFRYDOG-033	33kV CB	2
LLANDYRNOG-033	33kV CB	3
LLANFAELOG-033	33kV CB	2
LLANFAIR PG-033	33kV CB	1
LLANFAIRFECHAN-033	Transformer	1
LLANFROTHEN-033	Transformer	1

Primary Substation	Asset Type	Number
LLANFWROG-033	33kV CB	2
LLANGAFFO-033	33kV CB	2
LLANGEFNI IND ESTATE-033	33kV CB	3
LLANGEFNI-033	Transformer	1
	33kV CB	2
LLANILAR-033	33kV CB	3
LLANRWST-033	Transformer	1
LLANSANNAN-033	Transformer	1
MANOD-033	33kV CB	2
PEBLIC MILLS-033	33kV CB	2
PENMAENMAWR-033	Transformer	1
	33kV CB	2
	11kV Primary Boards	1
PENYGROES-033	Transformer	1
POINT OF AYR LOCAL-033	33kV CB	4
PORTHMADOG-033	Transformer	1
PWLLHELI-033	Transformer	1
RHOSLAN-033	33kV CB	2
RHYD Y FOEL-033	Transformer	1
RHYL GRID-033	33kV CB	7
RIVALS-033	Transformer	1
	33kV CB	2
WAENFAWR-033	Transformer	1
	33kV CB	2

33kV OHL Works

Circuit Ref No.	Circuit Name	OHL Length (km)	Rebuild (km)	Refurb (km)	Year
MW803805	CEMAES BAY to AMLWCH	8.05	8.05	0.00	2015
MW809846	LLANGEFNI to MONA	8.07	8.07	0.00	2015
MW825836	EDERN to BOTWNNOG	8.61	0.00	8.61	2016
MW819899	FERODO to BANGOR GRID	7.95	0.00	7.95	2016
MW838848	LLANFAIR PG to TRYSGLWYN	21.05	21.05	0.00	2016
MW831832	PORTHMADOG to LLANFROTHEN	4.93	0.00	4.93	2016
MW826827	RIVALS to FOUR CROSSES	6.17	0.00	6.17	2016
MW716718	RUTHIN to CEFN MAWR	6.19	6.19	0.00	2016
MW701722	ABERGELE to PENSARN	2.01	2.01	0.00	2017
MW701761	ABERGELE to RHYD Y FOEL	5.66	5.66	0.00	2017
MW819820	FERODO to CAERNARFON	2.68	0.00	2.68	2017
MW838839	LLANFAIR PG to LLANDEGFAN	3.25	0.00	3.25	2017
MW838843	LLANFAIR PG to LLANGEFNI IND EST	11.54	11.54	0.00	2017
MW832833	LLANFROTHEN to MAENTWROG	0.54	0.54	0.00	2017
MW815899	MINFFORDD to BANGOR GRID	4.38	0.00	4.38	2017
MW818823	PEBLIC MILLS to PENYGROES	11.42	0.00	11.42	2017
MW707731	PRESTATYN to ST. ASAPH GRID	10.10	0.00	10.10	2017
MW701725	ABERGELE to WESTBOURNE AVENUE	3.70	0.00	3.70	2018
MW820821	CAERNARFON to WAENFAWR	4.59	4.59	0.00	2018
MW824832	CWM DYLI to LLANFROTHEN	15.60	15.60	0.00	2018
MW827829	FOUR CROSSES to BUTLINS	4.47	0.00	4.47	2018
MW827830	FOUR CROSSES to RHOSLAN	8.41	0.00	8.41	2018
MW751766	LLANDUDNO to DEGANWY	1.79	0.00	1.79	2018
MW806810	LLANDYFRYDOG to PENTRAETH	12.47	0.00	12.47	2018
MW761767	RHYD Y FOEL to LLYSFAEN ROAD	4.24	0.00	4.24	2018
MW821822	WAENFAWR to LLANBERIS	8.31	0.00	8.31	2018
MW805848	AMLWCH to TRYSGLWYN	5.19	0.00	5.19	2019

Circuit Ref No.	Circuit Name	OHL Length (km)	Rebuild (km)	Refurb (km)	Year
MW758763	COLWYN BAY to DOLGARROG	13.56	13.56	0.00	2015
MW827840	FOUR CROSSES to CARMEL	24.91	24.91	0.00	2019
MW711734	HOLYWELL to HAMILTON OIL	8.72	0.00	8.72	2019
MW711726	HOLYWELL to POINT OF AYR LOCAL	10.10	0.00	10.10	2019
MW705729	RHUDDLAN to RHYL GRID	3.05	0.00	3.05	2019
MW805806	AMLWCH to LLANDYFRYDOG	5.60	0.00	5.60	2020
MW701731	ABERGELE to ST. ASAPH GRID	6.57	6.57	0.00	2016
MW707730	PRESTATYN to GRAIG FAWR	1.91	1.91	0.00	2016
MW820840	CAERNARFON to CARMEL	10.74	0.00	10.74	2020
MW827826	FOUR CROSSES to PWLLHELI	5.42	0.00	5.42	2020
MW764770	LLANRWST to MOEL MAELOGEN	3.74	0.00	3.74	2020
MW818820	PEBLIC MILLS to CAERNARFON	1.48	0.00	1.48	2020
MW810838	PENTRAETH to LLANFAIR PG	6.95	0.00	6.95	2020
MW835844	MANOD to BLAENAU PLASTICS	2.82	2.82	0.00	2015
MW765834	BETWS-Y-COED to BLAENAU FFESTINIOG	16.77	16.77	0.00	2021
MW807850	CAERGEILIOG to ALPOOD	2.81	0.00	2.81	2021
MW804807	LLANDDEUSANT to CAERGEILIOG	7.97	0.00	7.97	2021
MW804845	LLANDDEUSANT to LLYN ALAW	4.37	0.00	4.37	2021
MW809843	LLANGEFNI to LLANGEFNI IND EST	0.20	0.00	0.20	2021
MW761763	RHYD Y FOEL to DOLGARROG	18.79	18.79	0.00	2021
MW805845	AMLWCH to LLYN ALAW	8.84	0.00	8.84	2022
MW836841	BOTWNNOG to ABERSOCH	5.06	0.00	5.06	2022
MW753754	CONWY to PENMAENMAWR	7.46	7.46	0.00	2022
MW711712	HOLYWELL to GREENFIELD	7.22	0.00	7.22	2022
MW833844	MAENTWROG to BLAENAU PLASTICS	0.87	0.00	0.87	2022
MW823826	PENYGROES to RIVALS	11.18	0.00	11.18	2022
MW716717	RUTHIN to LLANARMON	7.42	7.42	0.00	2022

SP ENERGY NETWORKS

RIIO ED1 ZONE MAPPING

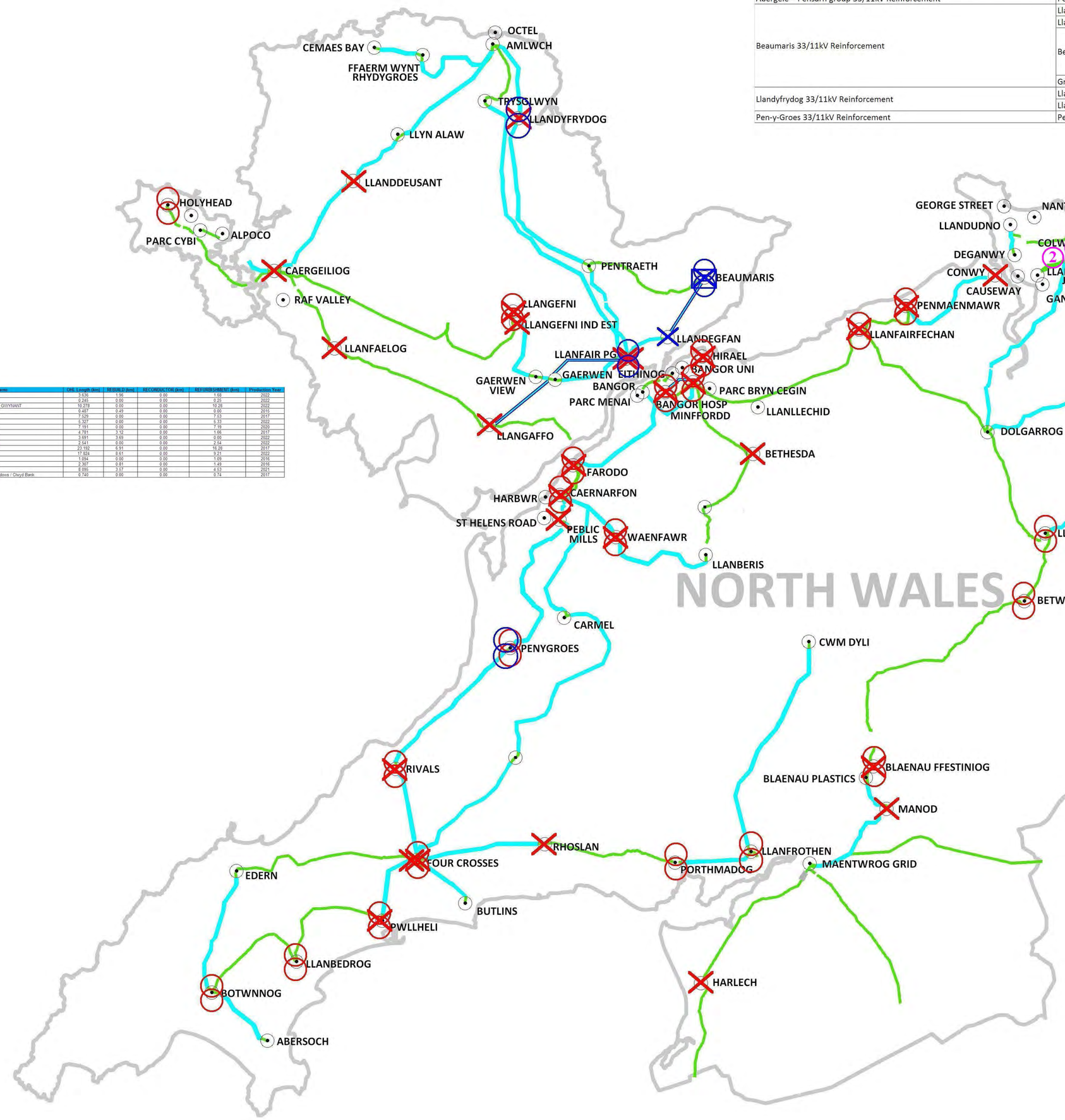
OPERATIONAL ZONE - GEOGRAPHICAL LAYOUT

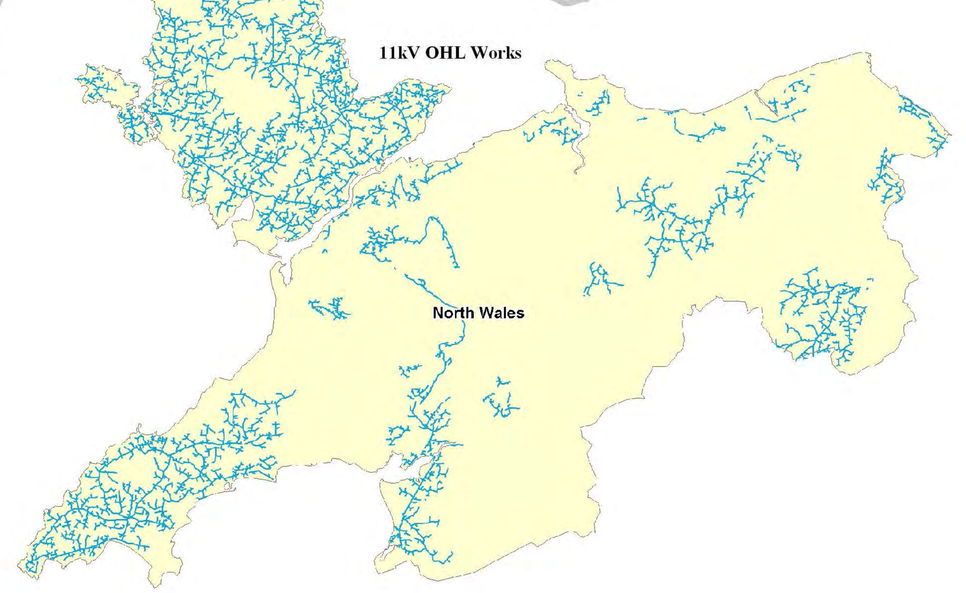
NORTH WALES

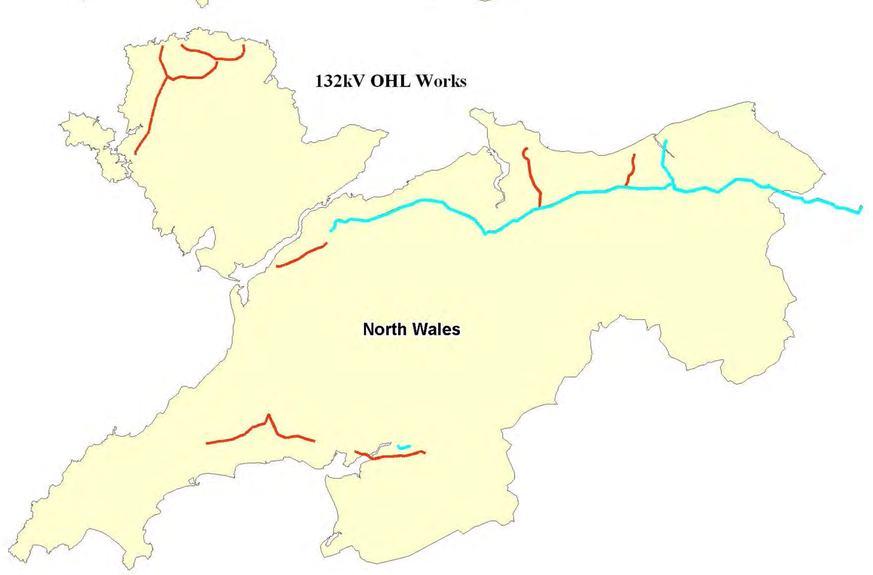
DISTRIBUTION NETWORK

VERSION 2
19/06/2013

CREATED BY: ANTHONY DONOGHUE
MODIFIED BY:BRENDAN GALLOWAY







NETWORK DIAGRAM KEY

- Transformer (Non Load)
- Transformer (Load)
- Switchgear (Non Load)
- Substation (Load)
- Village Modernisation
- Switchboard (Load)
- Existing 33kV Network
- 33kV OHL Works
- New 33kV Circuit
- 132 kV Transformer Refurbishment
- 132kV Switchgear

Additional Equipment

11 kV NCBs	11 kV RMUs	11 kV Transformers
9	189	79

Network Circuit Breakers Locations

Location	Total
MOLAR PRODUCTS-011	4
POULTON INTAKE WORKS-011	5

Load Related Primary Projects

Project Title	Site Name	Asset Type	Job Type	Number	Production Year
Caergwrle 33/11kV Reinforcement	Caergwrle	Primary Transformer	Reinforcement	1	2019
Coedpoeth 33/11kV Reinforcement	Brymbo Grid	Substation	Reinforcement	1	2017
Flint Reinforcement	Flint	Substation	Reinforcement	1	Post 2016
Ifton 33/11kV Reinforcement	Ifton	Primary Transformer	Reinforcement	1	Post 2019
		Switchboard	Reinforcement	1	
Legacy 400/132kV Busbar Security of Supply works	Legacy	Switchgear	Reinforcement	1	2015
Llandrinio 33/11kV Reinforcement	Llandrinio	Primary Transformer	Reinforcement	1	Post 2019
Whitchurch 33kV Reinforcement	Whitchurch	Grid Transformer	Reinforcement	1	2013
		Switchboard	Reinforcement	1	

Non-Load Related Primary Projects

Primary Substation	Asset Type	Number
ASH ROAD-033	33kV RMU	1
	Transformer	1
BALA-033	Transformer	1
BERSHAM COLLIERY-033	Transformer	1
BERSHAM ROAD-033	Transformer	1
BUCKLEY-033	Transformer	1
CADBURYS - KRONOSPAN-033	Transformer	1
CEFN MAWR-033	33kV CB	4
CLYWEDOG ROAD-033	33kV CB	4
CRIGGION RADIO-011	11kV Primary Board	1
DUNLOP PLASTICS-033	33kV CB	2
FLINT-033	Transformer	1
	33kV CB	1
GRESFORD INDUSTRIAL ESTATE-011	11kV Primary Board	1
JCB TRANSMISSION-011	11kV Primary Board	1
KINNERTON-033	33kV CB	2
LLANDDU QUARRY-033	Transformer	1
MAELOR CREAMERY-033	Transformer	1
	33kV CB	2
NORTH WALES PAPER-033	33kV CB	3
OSWESTRY GRID-011	Transformer	1
OSWESTRY GRID-033	11kV Primary Board	1
OVERTON-033	Transformer	1
PANDY-011	11kV Primary Board	1
QUEENSFERRY-033	33kV CB	5
RHYD Y GOLEU-033	Transformer	1
ROSSETT-033	33kV CB	4
TETRA PAK-033	33kV CB	2
WEST FELTON-033	Transformer	1
	33kV CB	2
WIMPEYS PANT QUARRY-033	Transformer	1
WREXHAM -033	33kV CB	11

11kV OHL Works

Primary Substation					
ASH ROAD	ASH ROAD–Pilas Gobourne Distributor	6.881	0.00	0.73	6.15	2018
BALA	BALA–L10950 Bala Town	0.654	0.65	0.00	0.00	2015
BASCHURCH	BASCHURCH–SHAWBURY LD170 (CM131)	26.217	0.00	0.32	25.89	2017
BASCHURCH	BASCHURCH–RUYTON XI TOWNS L1389 (CM133)	9.741	0.00	2.24	7.50	2020
BASCHURCH	BASCHURCH–ELLESCOCKSHUTT L2164 (CM164)	16.360	0.00	0.00	16.36	2022
BASCHURCH	BASCHURCH–BAGLEY AND HORDLEY L10485 (CM134)	13.402	0.00	0.00	13.40	2022
BERSHAM COLLIERY	BERSHAM COLLIERY–ERDDIG	23.586	0.00	8.00	15.59	2019
BERSHAM COLLIERY	BERSHAM COLLIERY–Bersham Colliery Ind. Estate	0.851	0.85	0.00	0.00	2019
BERSHAM COLLIERY	BERSHAM COLLIERY–Gyfelia / Eyton Areas	0.091	0.00	0.00	0.09	2019
BRITISH AEROSPACE	BRITISH AEROSPACE–Premier Stone	0.671	0.67	0.00	0.00	2022
BRITISH AEROSPACE	BRITISH AEROSPACE–Provender Mill	2.057	1.03	1.03	0.00	2022
BROMFIELD	BROMFIELD–Wylfa Hill (CM331)	2.533	2.05	0.00	0.49	2016
BROMFIELD	BROMFIELD–Leeswood (CM332)	15.084	10.06	0.00	5.03	2018
BUCKLEY	BUCKLEY–CHESTER ROAD	5.598	4.29	0.00	1.31	2015
BUCKLEY	BUCKLEY–Barnel Lane	11.460	0.00	0.00	11.46	2018
BUCKLEY CROSS	BUCKLEY CROSS–Windmill Road	0.714	0.00	0.00	0.71	2017
BUCKLEY CROSS	BUCKLEY CROSS–Elfed Park	15.843	0.00	0.00	15.84	2018
BUTTINGTON CROSS	BUTTINGTON CROSS–LEISURE CENTRE CAMEHOME EBW-WEM	1.015	0.00	0.00	1.02	2016
BUTTINGTON CROSS	BUTTINGTON CROSS–WIPAC	0.664	0.66	0.00	0.00	2016
CAERGWRLE	CAERGWRLE–Mold Road / Ffrodd L758	22.999	0.00	0.35	22.65	2015
CAERGWRLE	CAERGWRLE–Penyffordd L91	13.182	13.18	0.00	0.00	2016
CAERGWRLE	CAERGWRLE–Coed Talon / Mold L91	35.945	0.00	0.00	35.95	2016
CAERGWRLE	CAERGWRLE–Manwel Drive / Welsh Aggregates L5578	11.856	7.90	0.00	3.95	2018
CEFN MAWR	CEFN MAWR–Bwlchtyn Oakulton / Rhydtalog L1183	6.545	3.42	0.85	2.27	2018
CEFN MAWR	CEFN MAWR–Cefn Mawr Quarry (CM185)	0.559	0.00	0.00	0.56	2020
COEDPOETH	COEDPOETH–HEOL CELYN	1.841	0.00	0.00	1.84	2017
COEDPOETH	COEDPOETH–Cae Crwn / Bwlchgwyn	27.166	0.00	0.85	26.32	2018
COEDPOETH	COEDPOETH–TALWRN ROAD/BRYN HYFRYD	6.881	0.00	0.98	5.90	2019
CONNAHS QUAY	CONNAHS QUAY–Croft Ave	0.133	0.00	0.00	0.13	2019
CORWEN	CORWEN–Maes Hyfryd	21.572	0.00	0.00	21.57	2021
CORWEN	CORWEN–Shelleys / Goddelwern / Pandy	10.089	3.83	0.19	6.06	2017
CRIGGION RADIO	CRIGGION RADIO–Wern Bridge L13/0220 (CM191)	4.530	2.34	0.00	2.19	2020
CRIGGION RADIO	CRIGGION RADIO–Buttington Brickworks L2520 (CM193)	19.913	0.00	0.00	19.91	2020
DAVY WAY	DAVY WAY–HOPE DISTRIBUTOR	6.758	4.51	0.00	2.25	2019
DEGANWY	DEGANWY–Vardre Estate	1.509	0.00	0.00	1.51	2017
ELLESMERE	ELLESMERE–OVERTON L5297 (CM281)	4.301	0.00	0.00	4.30	2019
ELLESMERE	ELLESMERE–PENLEY L3005 (CM282)	12.953	0.00	2.83	10.32	2019
ELLESMERE	ELLESMERE–BRIDGEWATER	6.450	0.00	0.00	6.45	2022
ELLESMERE	ELLESMERE–ELSON L778 (CM287)	1.662	0.00	0.00	1.66	2022
EXPRESS FOODS	EXPRESS FOODS–Wallasey/d - Baden Pump L11691 (CM357)	0.231	0.00	0.00	0.23	2022
EXPRESS FOODS	EXPRESS FOODS–Shottatton/Olden Lane L684 (CM358)	6.606	0.00	0.00	6.61	2022
EXPRESS FOODS	EXPRESS FOODS–Sardisten L521 (CM301)	9.465	0.00	0.00	9.47	2022
FIRESTONE	FIRESTONE–Pump House / The Oaks	11.163	0.00	0.00	11.16	2018
FLINT	FLINT–Hillsort Avenue / Greenfield Distribu	2.249	0.00	0.00	2.25	2015
GLAN YR AFON	GLAN YR AFON–CORWEN - L343	6.768	4.34	1.80	0.62	2017
GLAN YR AFON	GLAN YR AFON–BALA - L343	27.813	10.41	10.54	6.86	2018
GLAN YR AFON	GLAN YR AFON–GELLI - L4348	5.191	3.95	0.00	1.24	2022
GLAN YR AFON	GLAN YR AFON–MAREDY - L4349	4.819	0.00	0.00	4.82	2022
HAWARDEN	HAWARDEN–A & D COUNCIL OFFICES	5.197	0.00	0.00	5.20	2019
IFTON	IFTON–MOORS BANK	9.717	0.00	0.00	9.72	2015
IFTON	IFTON–Stans Shop - 09/1125 (CM015)	0.655	0.00	0.00	0.66	2017
IFTON	IFTON–Overton - L1180 (CM011)	14.350	0.00	0.75	13.60	2018
IFTON	IFTON–St Martins - L783 (CM012)	27.058	0.00	0.00	27.06	2018
IFTON	IFTON–Glyn Morlais Chirk - L4993 (CM013)	5.245	0.00	0.00	5.25	2021
KINNERTON	KINNERTON–Hawarden Rd No 2 Wem L5009 (CM044)	20.079	13.38	0.00	6.69	2021
LLANDRINIO	LLANDRINIO–Crew Green L136 (CM182)	30.084	0.00	0.00	30.08	2015
LLANDRINIO	LLANDRINIO–Four Crosses L2766 (CM185)	11.069	0.00	0.00	11.07	2021
LLANDRINIO	LLANDRINIO–Pool Quay L2545 (CM183)	18.437	12.29	0.00	6.15	2022
LLANFAIRFECHAN	LLANFAIRFECHAN–Tydain Drycin	5.207	0.00	0.52	4.69	2018
LLANSILIN	LLANSILIN–Racecourse L857 (CM072)	63.133	16.95	0.00	46.19	2019
LLANSILIN	LLANSILIN–TREFLACH-L1821 (CM074)	34.424	14.22	0.00	20.20	2020
LLANSILIN	LLANSILIN–CANDY	17.413	7.17	0.00	10.24	2021
LLANSILIN	LLANSILIN–RHYDLAS-L-8291 (CM071)	16.713	0.00	0.00	16.71	2022
LLAY	LLAY–Country Produce	0.225	0.23	0.00	0.00	2016
LLAY	LLAY–Burton	12.958	0.00	1.03	11.92	2017
LLAY	LLAY–Parrcars Estate	0.207	0.00	0.00	0.21	2017
LLYNCLYS	LLYNCLYS–Lloyds Animal Foods L512 (CM092)	24.808	0.00	0.00	24.81	2015
LLYNCLYS	LLYNCLYS–L526 Halstock (CM093)	24.249	0.00	0.00	24.25	2017
LLYNCLYS	LLYNCLYS–Buttington Contractors L85 (CM094)	7.590	0.00	0.00	7.59	2019
LLYNCLYS	LLYNCLYS–Trefarn L6437 (CM095)	0.116	0.00	0.00	0.12	2022
MAELOR CREAMERY	MAELOR CREAMERY–Plas L4912 from MS33 feeder	20.636	0.00	1.46	19.18	2016
MAELOR CREAMERY	MAELOR CREAMERY–Cross Lanes	7.377	0.00	0.29	7.09	2020
MAES Y CLAWDD	MAES Y CLAWDD–MORGANS	0.104	0.00	0.00	0.10	2022
METAL BOX CO	METAL BOX CO–SAXON ROAD	1.592	0.80	0.00	0.80	2015
MIXALLOY	MIXALLOY–HAWARDEN SHEETERS	4.502	0.00	0.00	4.50	2021
MMB ELLESMERE	MMB ELLESMERE–Bore Dav/Cherry Gr. L10440 (CM 286)	31.781	0.00	0.58	31.20	2018
MMB ELLESMERE	MMB ELLESMERE–Baschurch L280 (CM285)	19.225	0.00	0.87	18.35	2021
MONSANTO	MONSANTO–Cae Gwlym / Froncysyllte	16.547.0	0.00	0.96	15.59	2017
MONSANTO	MONSANTO–Bryn Hovell / Llangollen	9.532	6.17	1.30	2.06	2019
MORDA	MORDA–Lower Bell Lines/RDC Sewage-L4296/5854	1.627	0.00	0.00	1.63	2022
MORDA	MORDA–Hanwas - L136172 & L4915 (CM102)	1.687	0.00	0.00	1.69	2022
NORTH WALES PAPER	NORTH WALES PAPER–Aldenham Tech.College / Beechwood Av	5.513	0.00	0.00	5.51	2022
OSWESTRY	OSWESTRY–Gobowen L8317 (CM126)	2.026	2.03	0.00	0.00	2016
OSWESTRY	OSWESTRY–Park Hall Sewage/ Tele HQ L511 (CM121)	19.575	0.00	0.76	18.81	2016
OVERTON	OVERTON–Bangor Is Coed L1101 (CM022)	60.455	0.00	0.00	60.45	2015
OVERTON	OVERTON–Ifton L5058 (CM021)	17.346	0.00	0.00	17.35	2016
OVERTON	OVERTON–Ellesmere L597 (CM023)	2.881	0.00	0.00	2.88	2022
PANDY	PANDY–Llay Court / Council St	1.738	1.74	0.00	0.00	2022
PANDY	PANDY–Cefn-y-Bedd	3.386	0.00	0.00	3.39	2022
POINT OF AYR LOCAL	POINT OF AYR LOCAL–Ffynnongroew	13.293	0.00	0.00	13.29	2016
POINT OF AYR LOCAL	POINT OF AYR LOCAL–Talacre / Gronant / Nant Hall	6.436	4.29	0.00	2.15	2020
POINT OF AYR LOCAL	POINT OF AYR LOCAL–Warwick Chemicals	5.524	0.00	0.00	5.52	2022
PONTERWYL	PONTERWYL–Moel Gron	0.945	0.00	0.00	0.95	2015
PONTERWYL	PONTERWYL–Chester Road	0.488	0.49	0.00	0.00	2015
PREES	PREES–PREES SALOPIAN L14199 (CM162)	38.426	0.00	3.13	35.30	2015
PREES	PREES–TILSTOCK L7IP (CM163)	29.262	0.00	0.00	29.26	2020
QUEENSFERRY	QUEENSFERRY–QueensferryServage Works	1.291	0.00	0.00	1.29	2022
RHOSNESNI	RHOSNESNI–CHERRY HILL DRIVE	0.033	0.00	0.00	0.03	2018
RHYD Y GOLEU	RHYD Y GOLEU–Rhydymwyn	4.278	2.87	0.08	1.32	2020
ROSSETT	ROSSETT–TREVALYN VILLAGE - HOLT	16.844	0.00	1.16	15.68	2019
ROSSETT	ROSSETT–TREVALLYN HALL	1.348	1.35	0.00	0.00	2020
ROSSETT	ROSSETT–KINNERTON & BURTON	5.115	0.00	0.00	5.12	2022
RUABON	RUABON–L72 (OWAL	0.659	0.00	0.00	0.66	2015
RUABON	RUABON–PLAS BENNION/AFONEITHA COUNCIL HOUSE	3.067	0.00	0.00	3.07	2015
RUABON	RUABON–WIS 20 PARK EYTON NEWBRIDGE/WYNNSTA	18.712	0.00	0.42	18.29	2017
RUABON	RUABON–BLACK LION ROAD	5.899	3.93	0.00	1.97	2018
RUABON	RUABON–RUABON SCHOOL	0.669	0.00	0.00	0.67	2019
SHAWBURY	SHAWBURY–WEM L 09 / 0743 (CM154)	18.292	0.00	0.00	18.29	2017
SHAWBURY	SHAWBURY–HADNALL L 3062 (CM153)	26.744	0.00	1.67	25.08	2018
SHAWBURY	SHAWBURY–STANTON L L1552 (CM155)	55.496	0.00	0.86	54.64	2020
TETRA PAK	TETRA PAK–Mawdsr Gas Works	2.149	0.00	0.00	2.15	2019
TRYWERYN	TRYWERYN–LIVERPOOL CORP POWER STATION	19.739	5.51	2.72	11.51	2015
TRYWERYN	TRYWERYN–ARENIG QUARRIES	17.371	5.70	10.25	1.42	2017
WEM	WEM–Whitchurch L79 (CM141)	18.943	0.00	0.67	18.27	2017
WEM	WEM–Ellesmere L4160 (CM146)	49.048	0.00	0.00	49.05	2019
WEM	WEM–Technical School L080 (CM142)	0.355	0.00	0.00	0.36	2021
WEM	WEM–Clive / Shawbury LD211 (CM144)	16.759	0.00	0.00	16.76	2022
WEM	WEM–Cockshutt School L080 (CM145)	39.128	0.00	1.32	37.81	2022
WEM EAST	WEM EAST–CHURCH LANE L09/18738 (CM335)	20.085	0.00	0.00	20.09	2020
WEM EAST	WEM EAST–ASTON ROAD EST L4909 (CM334)	0.956	0.00	0.00	0.96	2021
WEST FELTON	WEST FELTON–L 511 QUEENS HEAD (CM271)	12.107	0.00	0.00	12.11	2017
WEST FELTON	WEST FELTON–L 522 REDNAL (CM272)	24.612	0.00	0.00	24.61	2018
WEST FELTON	WEST FELTON–L 14845 TWYFORDS (CM273)	6.821	0.00	0.00	6.82	2019
WHITCHURCH	WHITCHURCH–Hadsted Ellesmere LD100 (CM048)	53.523	0.00	0.00	53.52	2017
WHITCHURCH	WHITCHURCH–Alkington Rd No 2 Wem L5009 (CM044)	2.560	0.00	0.00	2.56	2019
WHITCHURCH	WHITCHURCH–Wrinehill L5985 (CM043)	20.079	13.38	0.00	6.69	2021
WHITCHURCH	WHITCHURCH–Willey Moor LD85 (CM047)	28.901	0.00	4.12	24.78	2022
WHITCHURCH	WHITCHURCH–Hanmer L5005 (CM045)	14.737	0.00	0.00	14.74	2022
WHITCHURCH	WHITCHURCH–Deemoss Hospital L10004 (CM042)	1.166	0.00	0.00	1.17	2022
WIMPEYS PANT QUARRY	WIMPEYS PANT QUARRY–PENTRE HALKYN / HOLYWELL	19.509	0.00	0.00	19.51	2019
WOODFIELD AVENUE	WOODFIELD AVENUE–R.C. School	1.282	0.00	0.00	1.28	2017
YOCKINGS GATE	YOCKINGS GATE–Whitchurch /Unit Denes L8994 (CM054)	45.906	0.00	1.14	44.77	2015
YOCKINGS GATE	YOCKINGS GATE–Station Road B L01854/621 (CM051)	2.280	0.00	0.00	2.28	2020
YSBYTY GLAN CLWYD	YSBYTY GLAN CLWYD–FAENOL FAWR	3.795	0.00	0.00	3.80	2022

33kV OHL Works

Circuit Name	OHL Length (km)	Rebuild (km)	Refurbishment (km)	Production Year
BASCHURCH to EXPRESS FOODS	3.33	0	3.33	2022
BASCHURCH to WEM	10.59	0	10.59	2019
BRYMBO GRID to BROMFIELD	0.00	12.77	0	2020
CADBURYS KRONOSPAN to OSWESTRY	19.01	0	19.01	2015
CAERGWRLE to BRYMBO GRID	6.48	0	6.48	2018
CAERGWRLE to CASTLE CEMENT	3.88	0	3.88	2022
CASTLE CEMENT to BUCKLEY	6.22	0	6.22	2020
CEFN MAWR to RHYD Y GOLEU	4.26	0	4.26	2017
COEDPOETH to LEGACY	3.01	0	3.01	2021
CORWEN to GLAN YR AFON	3.86	0	3.86	2019
CORWEN to LEGACY	28.09	0	28.09	2022
DAVY WAY to BRYMBO GRID	5.77	0	5.77	2017
DENBIGH to LLANDYRNOG	5.67	5.67	0	2015
ELLESMERE to LIVERPOOL ROAD 33kV	14.74	0	14.74	2021
ELLESMERE to WEM	24.44	0	24.44	2018
FLINT to WOODFIELD AVENUE	0.13	0	0.13	2021
GRESFORD IND EST to BRYMBO GRID	0.00	0	6.70	2018
HAWARDEN to CASTLE CEMENT	4.72	0	4.72	2021
HAWARDEN to FLINT	11.74	0	11.74	2020
HAWARDEN to NORTH WALES PAPER	3.77	0	3.77	2019
IFTON to OSWESTRY	7.20	0	7.20	2021
IFTON to OVERTON	7.41	0	7.41	2019
JOHNSTOWN to IFTON	9.21	0	9.21	2018
LEGACY to BERSHAM COLLIERY	1.58	1.58	0	2016
LEGACY to BERSHAM ROAD	2.99	2.99	0	2020
LEGACY to JOHNSTOWN	0.98	0	0.98	2021
LLANDRINIO to CRIGGION RADIO	3.04	0	3.04	2016
LLANFAIRFECHAN to DOLGARROG	11.33	0	11.33	2017
LLANGOLLEN to MONSANTO	5.59	5.59	0	2016
LLYNCLYS to LLANDRINIO	6.50	0	6.50	2017
MARCHWIEL GRID to DUCKINGTON	10.76	0	10.76	2020
MIXALLOY to ENGINEER PARK	2.23	2.23	0	2015
NANT HALL to POINT OF AYR LOCAL	5.23	5.23	0	2020
OSWESTRY to WEST FELTON	6.35	0	6.35	2016
PANDY to MARCHWIEL GRID	2.11	0	2.11	2021
PREES to WEM EAST	4.97	4.97	0	2022
WEM to WEM EAST	2.85	0	2.85	2017
WHITCHURCH to LIVERPOOL ROAD 33kV	1.47	0	1.47	2021
YOCKINGS GATE to PREES	9.63	0	9.63	2015

1 IND COOPE	12 HOYA GLASS
2 CHESTER ST	13 W I E CENTRAL
3 RHOSNESNI	14 DUNLOP PLASTICS
4 TUTTLE ST	15 CLYWEDOG RD
5 EAGLES MEADOW	16 DEESIDE ALUMINIUM
6 WHITEGATE	17 CONTINENTAL CAN
7 WREXHAM	18 PIRESTONE
8 RECSAM COMPONENTS	19 BICC WREXHAM
9 ASH ROAD	20 MARCHWIEL
10 JCB TRANSMISSION	21 FIBREGLASS
11 KELLOGGS WREXHAM	22 TETRA PAK

SP ENERGY NETWORKS

RIIO ED1 ZONE MAPPING

OPERATIONAL ZONE - GEOGRAPHICAL LAYOUT

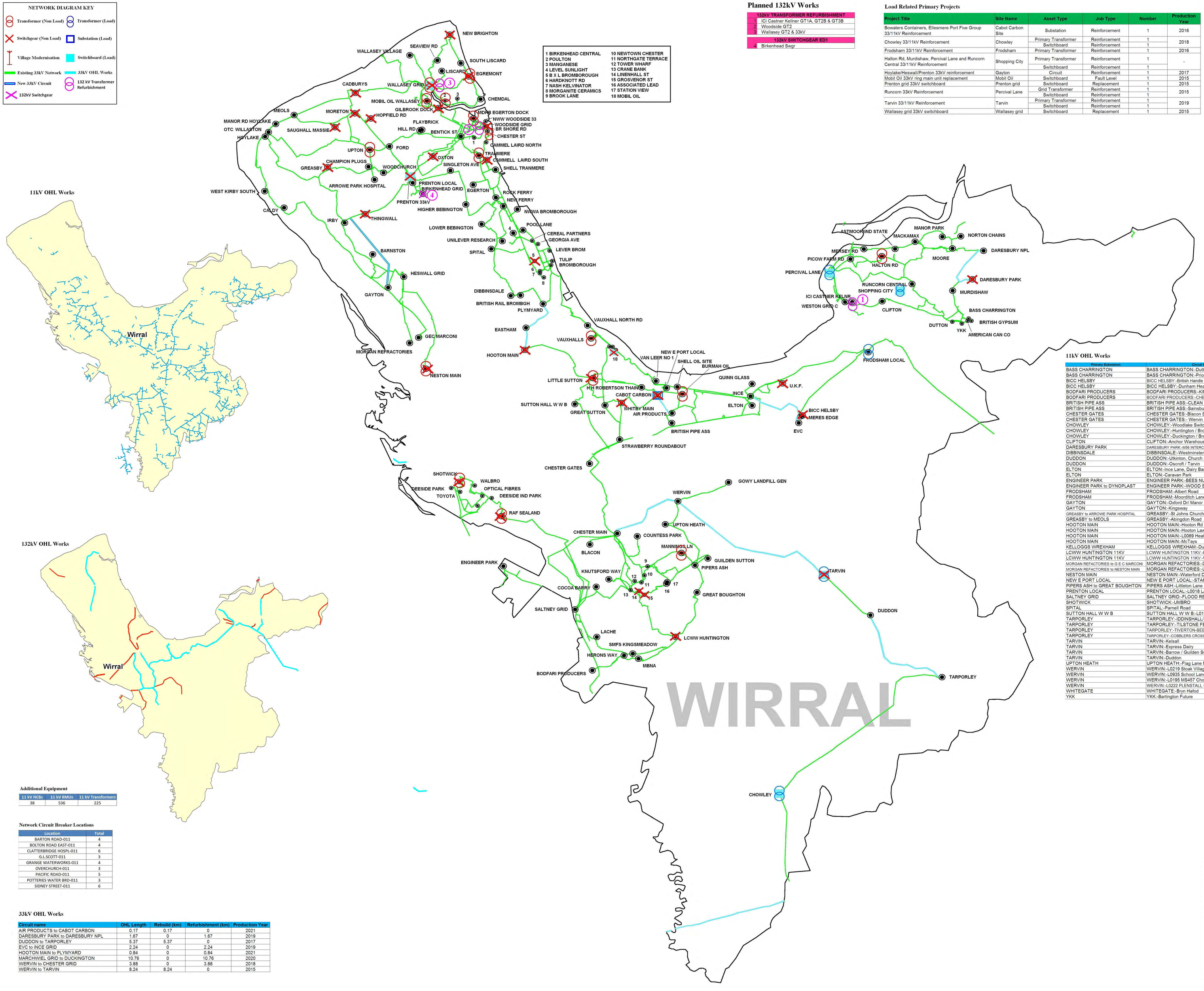
DEE VALLEY / OSWESTRY

DISTRIBUTION NETWORK

VERSION 2
19/06/2013

CREATED BY: MARIA ANZOLA
MODIFIED BY: BRENDAN GALLOWAY

OSWESTRY



Planned 132kV Works

132kV TRANSFORMER REFURBISHMENT	
1	ICI Castner Kellner GT1A, GT2B & GT3B
2	Woodside GT2
3	Wallasey GT2 & 33kV
132kV SWITCHGEAR ED1	
4	Birkenhead Swgr

Load Related Primary Projects

Project Title	Site Name	Asset Type	Job Type	Number	Production Year
Bowaters Containers, Ellesmere Port Five Group 33/11kV Reinforcement	Cabot Carbon Site	Substation	Reinforcement	1	2016
Chowley 33/11kV Reinforcement	Chowley	Primary Transformer	Reinforcement	1	2018
		Switchboard	Reinforcement	1	
Frodsham 33/11kV Reinforcement	Frodsham	Primary Transformer	Reinforcement	1	2016
Halton Rd, Murdishaw, Percival Lane and Runcorn Central 33/11kV Reinforcement	Shopping City	Primary Transformer	Reinforcement	1	-
		Switchboard	Reinforcement	1	
Hoylake/Heswall/Prenton 33kV reinforcement	Gayton	Circuit	Reinforcement	1	2017
Mobil Oil 33kV ring main unit replacement	Mobil Oil	Switchboard	Fault Level	1	2015
Prenton grid 33kV switchboard	Prenton grid	Switchboard	Replacement	1	2015
Runcorn 33kV Reinforcement	Percival Lane	Grid Transformer	Reinforcement	1	2015
		Switchboard	Reinforcement	1	
Tarvin 33/11kV Reinforcement	Tarvin	Primary Transformer	Reinforcement	1	2019
		Switchboard	Reinforcement	1	
Wallasey grid 33kV switchboard	Wallasey grid	Switchboard	Replacement	1	2015

Non-Load Related Primary Projects

Primary Substation	Asset Type	Number
BURMAH OIL-033	33kV RMU	1
	Transformer	1
CAMMELL LAIRD SOUTH-011	11kV Primary Board	1
DARESBURY NPL-033	33kV CB	3
EGREMONT-033	33kV RMU	1
	Transformer	1
ENGINEER PARK-011	11kV Primary Board	1
HALTON ROAD-033	33kV RMU	1
	Transformer	1
LCWW HUNTINGTON 6KV-033	33kV CB	4
LITTLE SUTTON-033	33kV RMU	1
	Transformer	1
MANNINGS LANE-033	33kV RMU	1
	Transformer	1
MOBIL OIL WALLASEY-033	33kV RMU	1
	Transformer	1
NESTON MAIN-033	Transformer	1
OXTON-011	11kV Primary Board	1
POULTON-033	Transformer	1
RAF SEALAND-033	33kV CB	2
SHOTWICK-033	Transformer	1
	33kV CB	4
SMFS KINGSMEADOW-011	11kV Primary Board	1
TARPORLEY-011	11kV Primary Board	1
TARVIN-011	11kV Primary Board	1
TARVIN-033	33kV CB	2
TRANMERE-033	33kV RMU	1
	Transformer	1
UPTON-033	33kV RMU	1
	Transformer	1
VAUXHALLS-033	Transformer	1
WALLASEY GRID-033	Transformer	1

11kV OHL Works

Primary Substation	Circuit Name	OHL Length (km)	REBUILD (km)	RECONDUCTOR (km)	REFURBISHMENT (km)	Production Year (km)
BASS CHARRINGTON	BASS CHARRINGTON:-Dutton Distributor	25.537	0.00	0.00	25.54	2020
BASS CHARRINGTON	BASS CHARRINGTON:-Priory Court	0.634	0.63	0.00	0.00	2022
BICC HELSBY	BICC HELSBY:-British Handle MS / Gardner Wilson	12.629	0.00	0.00	12.63	2017
BICC HELSBY	BICC HELSBY:-Dunham Heath	8.102	0.00	0.07	8.03	2019
BODFARI PRODUCERS	BODFARI PRODUCERS:-KINNERTON	6.318	0.00	0.00	6.32	2020
BODFARI PRODUCERS	BODFARI PRODUCERS:-CHESTER CURZON PARK	3.007	3.01	0.00	0.00	2022
BRITISH PIPE ASS	BRITISH PIPE ASS:-CLEAN WATER SYSTEM	3.588	0.00	0.00	3.59	2020
BRITISH PIPE ASS	BRITISH PIPE ASS:-Sainsburys / Motorway Lighting	0.680	0.00	0.00	0.68	2022
CHESTER GATES	CHESTER GATES:-Blacon Shotwick	7.155	0.00	0.00	7.16	2022
CHESTER GATES	CHESTER GATES:- Wervin Backford	1.751	0.00	0.00	1.75	2022
CHOWLEY	CHOWLEY:-Woodlake Switches	29.485	0.00	0.00	29.49	2017
CHOWLEY	CHOWLEY:-Huntington / Brookdale	27.625	10.97	0.00	16.66	2019
CHOWLEY	CHOWLEY:-Duckington / Broxton / Carden	15.292	0.00	0.00	15.29	2019
CLIFTON	CLIFTON:-Anchor Warehouse	1.127	0.00	0.00	1.13	2020
DARESBURY PARK	DARESBURY PARK:-M56 INTERCHANGE / NEWTON BANK	0.845	0.85	0.00	0.00	2019
DIBBINSDALE	DIBBINSDALE:-Westminster Drive	7.620	0.00	0.00	7.62	2021
DUDDON	DUDDON:-Urkinton, Church St. / Kelsall	18.229	0.00	0.00	18.23	2018
DUDDON	DUDDON:-Oscroft / Tarvin	4.475	0.00	0.00	4.48	2019
ELTON	ELTON:-Ince Lane, Dairy Bank	4.660	0.79	0.00	3.87	2017
ELTON	ELTON:-Caravan Park	1.609	0.80	0.00	0.80	2022
ENGINEER PARK	ENGINEER PARK:-BEES NURSERIES	0.755	0.00	0.00	0.76	2017
ENGINEER PARK to DYNOPLAST	ENGINEER PARK:-WOOD STREET	0.261	0.26	0.00	0.00	2017
FRODSHAM	FRODSHAM:-Albert Road	0.068	0.07	0.00	0.00	2020
FRODSHAM	FRODSHAM:-Moorditch Lane M/s	0.592	0.00	0.00	0.59	2020
GAYTON	GAYTON:-Oxford Dr/ Manor Road	3.859	0.00	0.00	3.86	2016
GAYTON	GAYTON:-Kingsway	2.391	0.00	0.00	2.39	2021
GREASBY to ARROWE PARK HOSPITAL	GREASBY:-St Johns Church	0.910	0.91	0.00	0.00	2017
GREASBY to MEOLS	GREASBY:-Abingdon Road	0.233	0.23	0.00	0.00	2017
HOOTON MAIN	HOOTON MAIN:-Hooton Rd Willaston	1.544	0.00	0.00	1.54	2016
HOOTON MAIN	HOOTON MAIN:-Hooton Lawn	1.568	0.00	0.00	1.57	2017
HOOTON MAIN	HOOTON MAIN:-L0069 Heath Lane	23.482	0.00	0.24	23.24	2017
HOOTON MAIN	HOOTON MAIN:-McTays	0.662	0.66	0.00	0.00	2017
KELLOGGS WREXHAM	KELLOGGS WREXHAM:-Dutton Diffith	16.842	0.00	0.00	16.84	2016
LCWW HUNTINGTON 11KV	LCWW HUNTINGTON 11KV:-BALDERTON/FARNDON	6.787	0.00	0.00	6.79	2019
LCWW HUNTINGTON 11KV	LCWW HUNTINGTON 11KV:-WAVERTON RECTORY	24.040	0.00	0.00	24.04	2020
MORGAN REFACTORIES to G E C MARCONI	MORGAN REFACTORIES:-Drake Road	2.262	0.00	0.00	2.26	2017
MORGAN REFACTORIES to NESTON MAIN	MORGAN REFACTORIES:-Leighton Road (South)	0.694	0.00	0.00	0.69	2020
NESTON MAIN	NESTON MAIN:-Waterford Drive	3.909	0.00	0.00	3.91	2020
NEW E PORT LOCAL	NEW E PORT LOCAL:-STANNEY MILL IND EST	0.435	0.44	0.00	0.00	2022
PIPERS ASH to GREAT BOUGHTON	PIPERS ASH:-Littleton Lane teed Hare Lane PM S/stn	8.429	0.00	0.00	8.43	2019
PRENTON LOCAL	PRENTON LOCAL:-L0018 LANDICAN	1.814	0.00	0.00	1.81	2021
SALTNEY GRID	SALTNEY GRID:-FLOOD RELIEF STATION	4.233	0.00	0.64	3.60	2021
SHOTWICK	SHOTWICK:-UMBRO	0.607	0.61	0.00	0.00	2020
SPITAL	SPITAL:-Parnell Road	0.603	0.60	0.00	0.00	2015
SUTTON HALL W W B	SUTTON HALL W W B:-L0157 Ledsham	9.545	0.00	0.00	9.55	2018
TARPORLEY	TARPORLEY:-IDDINSHALL/ DUDDON L0552	14.265	0.00	0.00	14.27	2016
TARPORLEY	TARPORLEY:-TILSTONE FEARNAL L0495	8.478	0.00	0.00	8.48	2017
TARPORLEY	TARPORLEY:-TIVERTON-BEESTON BRIDGE L0493	12.795	8.20	0.00	4.59	2018
TARPORLEY	TARPORLEY:-COBBLERS CROSS/ BOWMERE ROAD L0498	3.542	0.00	0.00	3.54	2022
TARVIN	TARVIN:-Kelsall	17.935	0.00	0.00	17.94	2018
TARVIN	TARVIN:-Express Dairy	0.511	0.00	0.00	0.51	2020
TARVIN	TARVIN:-Barrow / Guilden Sutton	14.789	0.00	0.00	14.79	2021
TARVIN	TARVIN:-Duddon	3.811	0.00	0.00	3.81	2022
UPTON HEATH	UPTON HEATH:-Flag Lane North	1.174	0.00	0.00	1.17	2021
WERVIN	WERVIN:-L0219 Stoak Village	3.615	0.00	0.00	3.62	2017
WERVIN	WERVIN:-L0935 School Lane, M.Trafford	14.323	9.70	0.00	4.62	2017
WERVIN	WERVIN:-L0195 MS457 Chorlton	10.850	3.99	0.00	6.86	2017
WERVIN	WERVIN:-L0222 PLENSTALL CLOSE, HOOLE VILLAGE	16.341	0.00	0.00	16.34	2017
WHITEGATE	WHITEGATE:-Bryn Hafod	3.901	1.43	0.62	1.85	2016
YKK	YKK-Bartington Future	17.130	0.00	0.00	17.13	2019

Additional Equipment

11 kV NCBs	11 kV RMUs	11 kV Transformers
38	536	225

Network Circuit Breaker Locations

Location	Total
BARTON ROAD-011	4
BOLTON ROAD EAST-011	4
CLATTERBRIDGE HOSPL-011	6
G.L.SCOTT-011	3
GRANGE WATERWORKS-011	4
OVERCHURCH-011	3
PACIFIC ROAD-011	5
POTTERIES WATER BRD-011	3
SIDNEY STREET-011	6

33kV OHL Works

Circuit name	OHL Length	Rebuild (km)	Refurbishment (km)	Production Year
AIR PRODUCTS to CABOT CARBON	0.17	0.17	0	2021
DARESBURY PARK to DARESBURY NPL	1.67	0	1.67	2019
DUDDON to TARPORLEY	5.37	5.37	0	2017
EVC to INCE GRID	2.24	0	2.24	2019
HOOTON MAIN to PLYMYARD	0.84	0	0.84	2021
MARCHWIEL GRID to DUCKINGTON	10.76	0	10.76	2020
WERVIN to CHESTER GRID	3.88	0	3.88	2018
WERVIN to TARVIN	8.24	8.24	0	2015

WIRRAL

SP ENERGY NETWORKS

RIIO ED1 ZONE MAPPING

OPERATIONAL ZONE - GEOGRAPHICAL LAYOUT

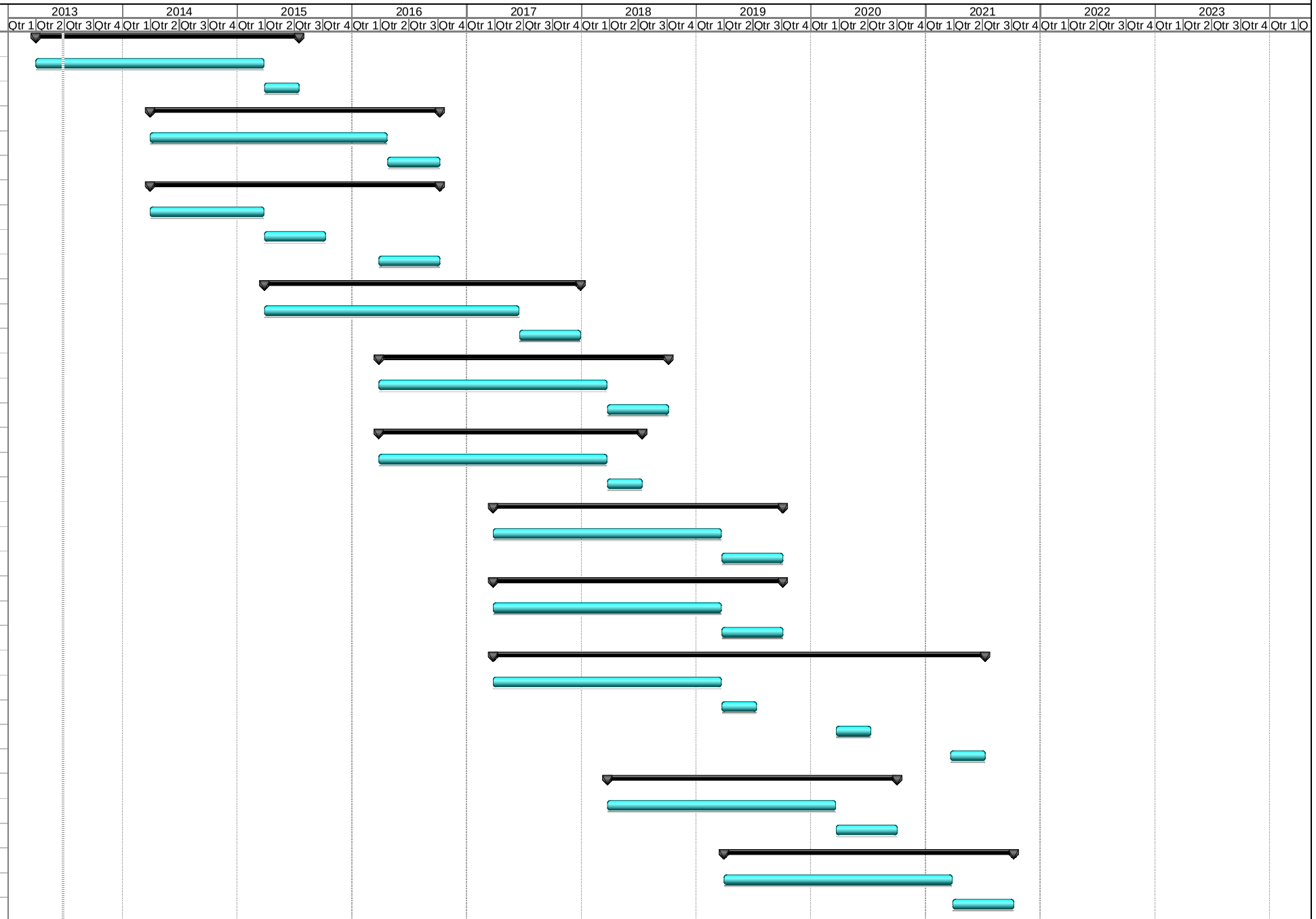
WIRRAL

DISTRIBUTION NETWORK

VERSION 2
19/06/2013

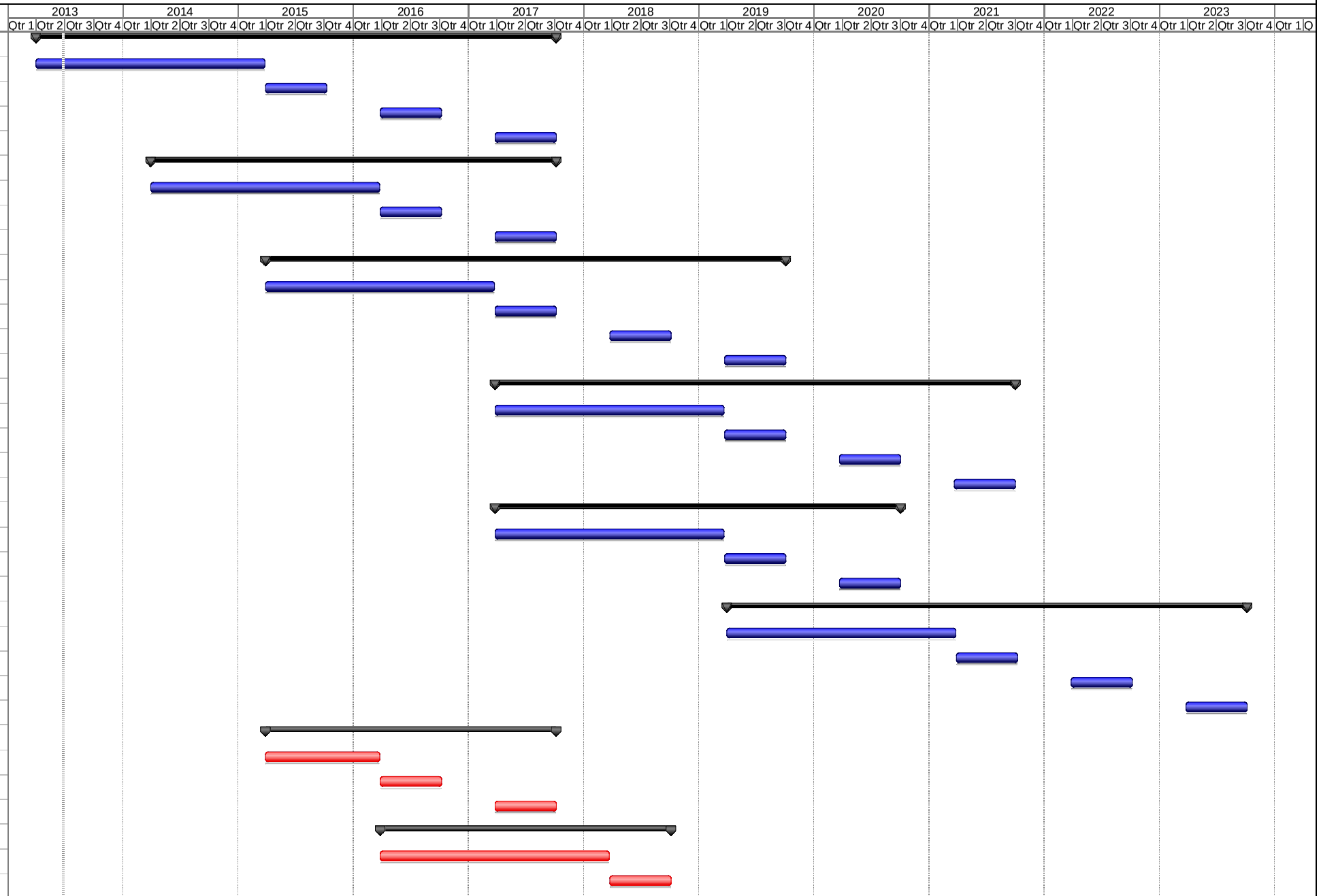
CREATED BY: MARIA ANZOLA
MODIFIED BY:BRENDAN GALLOWAY

ID	Task Name	Duration	Start	Finish
1	**Newtown GT2**	**30 mons**	**Mon 01/04/13**	**Fri 17/07/15**
2	Planning, Design & Commence site wks	26 mons	Mon 01/04/13	Fri 27/03/15
3	Outage Wks	4 mons	Mon 30/03/15	Fri 17/07/15
4	**Aberystwyth GT1 & 33kV Swgr**	**33 mons**	**Mon 31/03/14**	**Fri 07/10/16**
5	Planning, Design & Commence site wks	27 mons	Mon 31/03/14	Fri 22/04/16
6	Outage Wks	6 mons	Mon 25/04/16	Fri 07/10/16
7	**Southport GT1 & GT2**	**33 mons**	**Mon 31/03/14**	**Fri 07/10/16**
8	Planning, Design & Commence site wks	13 mons	Mon 31/03/14	Fri 27/03/15
9	Outage Wks	7 mons	Mon 30/03/15	Fri 09/10/15
10	Outage Wks	7 mons	Mon 28/03/16	Fri 07/10/16
11	**Elworth GT1 & MC1**	**36 mons**	**Mon 30/03/15**	**Fri 29/12/17**
12	Planning, Design & Commence site wks	29 mons	Mon 30/03/15	Fri 16/06/17
13	Outage Wks	7 mons	Mon 19/06/17	Fri 29/12/17
14	**Coppenhall GT1**	**33 mons**	**Mon 28/03/16**	**Fri 05/10/18**
15	Planning, Design & Commence site wks	26 mons	Mon 28/03/16	Fri 23/03/18
16	Outage Wks	7 mons	Mon 26/03/18	Fri 05/10/18
17	**Litherland GT1A & GT1B**	**30 mons**	**Mon 28/03/16**	**Fri 13/07/18**
18	Planning, Design & Commence site wks	26 mons	Mon 28/03/16	Fri 23/03/18
19	Outage Wks	4 mons	Mon 26/03/18	Fri 13/07/18
20	**Rhyl GT1**	**33 mons**	**Mon 27/03/17**	**Fri 04/10/19**
21	Planning, Design & Commence site wks	26 mons	Mon 27/03/17	Fri 22/03/19
22	Outage Wks	7 mons	Mon 25/03/19	Fri 04/10/19
23	**Wallasey GT2 & 33kV Swgr**	**33 mons**	**Mon 27/03/17**	**Fri 04/10/19**
24	Planning, Design & Commence site wks	26 mons	Mon 27/03/17	Fri 22/03/19
25	Outage Wks	7 mons	Mon 25/03/19	Fri 04/10/19
26	**ICI Castner Kellner GT1A, GT2B & GT3B**	**56 mons**	**Mon 27/03/17**	**Fri 09/07/21**
27	Planning, Design & Commence site wks	26 mons	Mon 27/03/17	Fri 22/03/19
28	Outage Wks	4 mons	Mon 25/03/19	Fri 12/07/19
29	Outage Wks	4 mons	Mon 23/03/20	Fri 10/07/20
30	Outage Wks	4 mons	Mon 22/03/21	Fri 09/07/21
31	**Colwyn Bay GT1**	**33 mons**	**Mon 26/03/18**	**Fri 02/10/20**
32	Planning, Design & Commence site wks	26 mons	Mon 26/03/18	Fri 20/03/20
33	Outage Wks	7 mons	Mon 23/03/20	Fri 02/10/20
34	**Woodside GT2**	**33 mons**	**Mon 01/04/19**	**Fri 08/10/21**
35	Planning, Design & Commence site wks	26 mons	Mon 01/04/19	Fri 26/03/21
36	Outage Wks	7 mons	Mon 29/03/21	Fri 08/10/21



Summary | 132 T/F. | 132 Swgr. | 132 Reinf. | 132 OHL | 132 Cable

ID	Task Name	Duration	Start	Finish
37	**Speke (1 Switch Mesh with G1A & GT3 & 33kV)**	**59 mons**	**Mon 01/04/13**	**Fri 06/10/17**
38	Planning, Design & Commence site wks	26 mons	Mon 01/04/13	Fri 27/03/15
39	Outage Wks	7 mons	Mon 30/03/15	Fri 09/10/15
40	Outage Wks	7 mons	Mon 28/03/16	Fri 07/10/16
41	Outage Wks	7 mons	Mon 27/03/17	Fri 06/10/17
42	**Birkenhead (132kV Double Busbar - 10 Bays)**	**46 mons**	**Mon 31/03/14**	**Fri 06/10/17**
43	Planning, Design & Commence site wks	26 mons	Mon 31/03/14	Fri 25/03/16
44	Outage Wks	7 mons	Mon 28/03/16	Fri 07/10/16
45	Outage Wks	7 mons	Mon 27/03/17	Fri 06/10/17
46	**Lister Drive (132kV Double Busbar & GT1 & GT2 - 10 Bays)**	**59 mons**	**Mon 30/03/15**	**Fri 04/10/19**
47	Planning, Design & Commence site wks	26 mons	Mon 30/03/15	Fri 24/03/17
48	Outage Wks	7 mons	Mon 27/03/17	Fri 06/10/17
49	Outage Wks	7 mons	Mon 26/03/18	Fri 05/10/18
50	Outage Wks	7 mons	Mon 25/03/19	Fri 04/10/19
51	**Rainhill (132kV Indoor AIS Double Busbar - 12 Bays)**	**59 mons**	**Mon 27/03/17**	**Fri 01/10/21**
52	Planning, Design & Commence site wks	26 mons	Mon 27/03/17	Fri 22/03/19
53	Outage Wks	7 mons	Mon 25/03/19	Fri 04/10/19
54	Outage Wks	7 mons	Mon 23/03/20	Fri 02/10/20
55	Outage Wks	7 mons	Mon 22/03/21	Fri 01/10/21
56	**Crewe 1 (132kV Double Busbar & GT1 - 13 Bays)**	**46 mons**	**Mon 27/03/17**	**Fri 02/10/20**
57	Planning, Design & Commence site wks	26 mons	Mon 27/03/17	Fri 22/03/19
58	Outage Wks	7 mons	Mon 25/03/19	Fri 04/10/19
59	Outage Wks	7 mons	Mon 23/03/20	Fri 02/10/20
60	**Gateacre (2 Switch Mesh & GT1 & 33kV)**	**59 mons**	**Mon 01/04/19**	**Fri 06/10/23**
61	Planning, Design & Commence site wks	26 mons	Mon 01/04/19	Fri 26/03/21
62	Outage Wks	7 mons	Mon 29/03/21	Fri 08/10/21
63	Outage Wks	7 mons	Mon 28/03/22	Fri 07/10/22
64	Outage Wks	7 mons	Mon 27/03/23	Fri 06/10/23
65	**Bootle-Fazakerley-Gillmoss-Kirkby 132kV Cable Circuit**	**33 mons**	**Mon 30/03/15**	**Fri 06/10/17**
66	Planning, Design & Commence site wks	13 mons	Mon 30/03/15	Fri 25/03/16
67	Outage Wks	7 mons	Mon 28/03/16	Fri 07/10/16
68	Outage Wks	7 mons	Mon 27/03/17	Fri 06/10/17
69	**Wavertree - Lister Drive 132kV Cable Circuit**	**33 mons**	**Mon 28/03/16**	**Fri 05/10/18**
70	Planning, Design & Commence site wks	26 mons	Mon 28/03/16	Fri 23/03/18
71	Outage Wks	7 mons	Mon 26/03/18	Fri 05/10/18

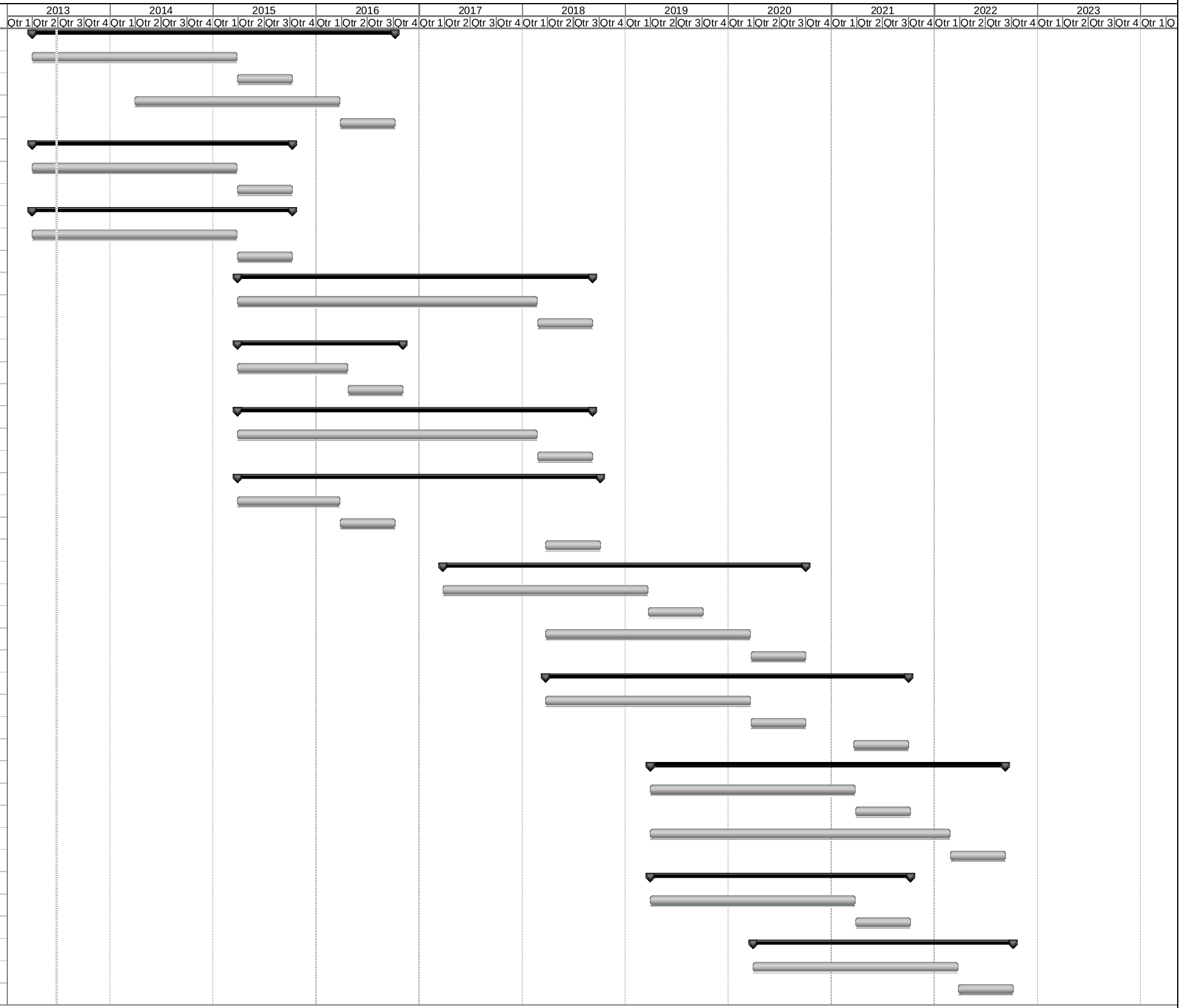


Summary | 132 T/F. | 132 Swgr. | 132 Reinf. | 132 OHL | 132 Cable

ID	Task Name	Duration	Start	Finish
72	**Lostock Reinforcement**	**30 mons**	**Mon 31/03/14**	**Fri 15/07/16**
73	Planning, Design & Commence site wks	23 mons	Mon 31/03/14	Fri 01/01/16
74	Outage Wks	7 mons	Mon 04/01/16	Fri 15/07/16
75	**Warrington Reinforcement**	**31 mons**	**Mon 31/03/14**	**Fri 12/08/16**
76	Planning, Design & Commence site wks	24 mons	Mon 31/03/14	Fri 29/01/16
77	Outage Wks	7 mons	Mon 01/02/16	Fri 12/08/16
78	**Legacy 132kV Reinforcement**	**30 mons**	**Mon 30/03/15**	**Fri 14/07/17**
79	Planning, Design & Commence site wks	23 mons	Mon 30/03/15	Fri 30/12/16
80	Outage Wks	7 mons	Mon 02/01/17	Fri 14/07/17
81	**Whitchurch Reinforcement**	**82 mons**	**Mon 30/03/15**	**Fri 09/07/21**
82	Planning, Design & Public Inquiry	70 mons	Mon 30/03/15	Fri 07/08/20
83	Commence site wks	12 mons	Mon 10/08/20	Fri 09/07/21
84	Outage Wks	7 mons	Mon 28/12/20	Fri 09/07/21
85	**Crewe 132kV Reinforcement**	**60 mons**	**Mon 30/03/15**	**Fri 01/11/19**
86	Planning, Design & Public Inquiry	48 mons	Mon 30/03/15	Fri 30/11/18
87	Commence site wks	12 mons	Mon 03/12/18	Fri 01/11/19
88	Outage Wks	7 mons	Mon 22/04/19	Fri 01/11/19
89	**Bold Prescot Widnes Reinforcement**	**29 mons**	**Wed 01/07/15**	**Tue 19/09/17**
90	Planning, Design & Commence site wks	25 mons	Wed 01/07/15	Tue 30/05/17
91	Outage Wks	4 mons	Wed 31/05/17	Tue 19/09/17
92	**Anglesey Reinforcement**	**67 mons**	**Mon 28/03/16**	**Fri 14/05/21**
93	Planning, Design & Commence site wks	60 mons	Mon 28/03/16	Fri 30/10/20
94	Outage Wks	7 mons	Mon 02/11/20	Fri 14/05/21
95	**Runcorn Reinforcement**	**30 mons**	**Mon 28/03/16**	**Fri 13/07/18**
96	Planning, Design & Commence site wks	23 mons	Mon 28/03/16	Fri 29/12/17
97	Outage Wks	7 mons	Mon 01/01/18	Fri 13/07/18
98	**Mid Wales Reinforcement**	**82 mons**	**Mon 28/03/16**	**Fri 08/07/22**
99	Planning, Design & Public Inquiry	70 mons	Mon 28/03/16	Fri 06/08/21
100	Commence site wks	12 mons	Mon 09/08/21	Fri 08/07/22
101	Outage Wks	7 mons	Mon 27/12/21	Fri 08/07/22
102	**Birkenhead Reinforcement**	**46 mons**	**Mon 27/03/17**	**Fri 02/10/20**
103	Planning, Design & Commence site wks	26 mons	Mon 27/03/17	Fri 22/03/19
104	Outage Wks	7 mons	Mon 25/03/19	Fri 04/10/19
105	Outage Wks	7 mons	Mon 23/03/20	Fri 02/10/20
106	**Brymbo/Hawarden/Holywell Reinforcement**	**46 mons**	**Mon 02/04/18**	**Fri 08/10/21**
107	Planning, Design & Commence site wks	26 mons	Mon 02/04/18	Fri 27/03/20
108	Outage Wks	7 mons	Mon 30/03/20	Fri 09/10/20
109	Outage Wks	7 mons	Mon 29/03/21	Fri 08/10/21
110				

Summary | 132 T/F. | 132 Swgr. | 132 Reinf. | 132 OHL | 132 Cable

ID	Task Name	Duration	Start	Finish
111	**A Line**	**46 mons**	**Mon 01/04/13**	**Fri 07/10/16**
112	Planning, Design & Commence site wks (Frodsham-Dutton-Mc	26 mons	Mon 01/04/13	Fri 27/03/15
113	Outage Wks (Frodsham-Dutton-Moore)	7 mons	Mon 30/03/15	Fri 09/10/15
114	Planning, Design & Commence site wks (Hartford-Crewe)	26 mons	Mon 31/03/14	Fri 25/03/16
115	Outage Wks (Hartford-Crewe)	7 mons	Mon 28/03/16	Fri 07/10/16
116	**CB Line**	**33 mons**	**Mon 01/04/13**	**Fri 09/10/15**
117	Planning, Design & Commence site wks	26 mons	Mon 01/04/13	Fri 27/03/15
118	Outage Wks	7 mons	Mon 30/03/15	Fri 09/10/15
119	**D2 Line**	**33 mons**	**Mon 01/04/13**	**Fri 09/10/15**
120	Planning, Design & Commence site wks	26 mons	Mon 01/04/13	Fri 27/03/15
121	Outage Wks	7 mons	Mon 30/03/15	Fri 09/10/15
122	**AH Line**	**45 mons**	**Mon 30/03/15**	**Fri 07/09/18**
123	Planning, Design & Commence site wks	38 mons	Mon 30/03/15	Fri 23/02/18
124	Outage Wks	7 mons	Mon 26/02/18	Fri 07/09/18
125	**AJ Line**	**21 mons**	**Mon 30/03/15**	**Fri 04/11/16**
126	Planning, Design & Commence site wks	14 mons	Mon 30/03/15	Fri 22/04/16
127	Outage Wks	7 mons	Mon 25/04/16	Fri 04/11/16
128	**H Line**	**45 mons**	**Mon 30/03/15**	**Fri 07/09/18**
129	Planning, Design & Commence site wks	38 mons	Mon 30/03/15	Fri 23/02/18
130	Outage Wks	7 mons	Mon 26/02/18	Fri 07/09/18
131	**YS Line**	**46 mons**	**Mon 30/03/15**	**Fri 05/10/18**
132	Planning, Design & Commence site wks	13 mons	Mon 30/03/15	Fri 25/03/16
133	Outage Wks	7 mons	Mon 28/03/16	Fri 07/10/16
134	Outage Wks	7 mons	Mon 26/03/18	Fri 05/10/18
135	**AC Line**	**46 mons**	**Mon 27/03/17**	**Fri 02/10/20**
136	Planning, Design & Commence site wks (St Asaph Dolgarrog)	26 mons	Mon 27/03/17	Fri 22/03/19
137	Outage Wks (St Asaph-Dolgarrog)	7 mons	Mon 25/03/19	Fri 04/10/19
138	Planning, Design & Commence site wks (Connahs Quay/Holyv	26 mons	Mon 26/03/18	Fri 20/03/20
139	Outage Wks (Connahs Quay/Holywell-St Asaph)	7 mons	Mon 23/03/20	Fri 02/10/20
140	**HA Line**	**46 mons**	**Mon 26/03/18**	**Fri 01/10/21**
141	Planning, Design & Commence site wks	26 mons	Mon 26/03/18	Fri 20/03/20
142	Outage Wks	7 mons	Mon 23/03/20	Fri 02/10/20
143	Outage Wks	7 mons	Mon 22/03/21	Fri 01/10/21
144	**BH Line**	**45 mons**	**Mon 01/04/19**	**Fri 09/09/22**
145	Planning, Design & Commence site wks (Wales)	26 mons	Mon 01/04/19	Fri 26/03/21
146	Outage Wks (Wales)	7 mons	Mon 29/03/21	Fri 08/10/21
147	Planning, Design & Commence site wks (Cheshire)	38 mons	Mon 01/04/19	Fri 25/02/22
148	Outage Wks (Cheshire)	7 mons	Mon 28/02/22	Fri 09/09/22
149	**PK Line**	**33 mons**	**Mon 01/04/19**	**Fri 08/10/21**
150	Planning, Design & Commence site wks	26 mons	Mon 01/04/19	Fri 26/03/21
151	Outage Wks	7 mons	Mon 29/03/21	Fri 08/10/21
152	**Q Line**	**33 mons**	**Mon 30/03/20**	**Fri 07/10/22**
153	Planning, Design & Commence site wks	26 mons	Mon 30/03/20	Fri 25/03/22
154	Outage Wks	7 mons	Mon 28/03/22	Fri 07/10/22



Summary | 132 T/F. | 132 Swgr. | 132 Reinf. | 132 OHL | 132 Cable