

Phase (Planning Permission)	Parts	Project Phase	Activities/Tasks	Construction Sub Phase/ Stage	Contractor	CEMP Section Reference	
Prior to Commencement of Development		Pre Commencement	Discharge of Pre-Commencement Conditions and delivery of previous commitments.	Pre Civil Construction: Ecology walkover surveys, baseline surface water & groundwater monitoring, noise, dust & vibration			
Construction of Unit 1 Development at Coolnabackey	Part 1	Pre Civil Construction	Borehole Decommissioning & Installation.	Modification and installation of boreholes to accommodate groundwater monitoring programme as required.	IE Consulting	Section 3	
				EARTHMOVING PLAN	CONSTRUCTION		
		Main Civil Construction Phase 1	Enabling works & site Establishment, Drainage & Surface Water Management, Main Construction of 110 kV Building	Stage 1: Site Preparation - Mobilise to site - Fencing & Security of Site - Ecological Buffer Zone - Overhead Cable Avoidance - Fencing & Protection of Boreholes		Kilwex Construction	Section 4.1
				Stage 2: Site Establishment - Site Access Route & hardstanding - Site Compound and Laydown Area - Permanent Berm Drainage (land drain & catchpits)			
				Stage 3: Excavate Ponds and associated Drainage - Excavate & Install Drainage connections between berm and ponds - Move spoil to berm - Excavate Ponds to formation level - remove spoil to berm area			
				Stage 4: Construct Drainage Ponds & Associated Infrastructure - Excavations for remaining drainage works - Install hydro brake, manhole at pond outlets, stone apron at stream - Install impermeable HDPE liner, Geotextile fleece & stone			
	Stage 5: 110 kV Building Footprint Excavation Works - Strip topsoil and install stone on haul route - All excavated spoil to be moved to berm - Excavate to formation 110 kV building footprint and install stone - Dewatering Procedure to be applied						
			Stage 6: Remainder of Civils & Excavation Works - Excavate and install drainage - Excavate trenches and install cable ducting - Excavate & Install tanks, oil separator etc - Dewatering Procedure to be applied	110 kV Building Construction: - Pour Foundations - Structural Steel Frame - Composite Cladding - First Floor - Internal Finishes, Building Services			
	Main Civil Construction Phase 2	Construction of 400 kV Building and Transformer bunds within site compound.	400kV Excavations - Excavate Building Footprint (Refer to Earthmoving Plan Stage 6) - 400 kV Cable Ducts Excavation - Excavate 400 kV Transformer Bund Footprint (Refer to Earthmoving Plan (Stage 6) - Dewatering Procedure to be applied	400kV Foundation & Ducting - Pour Foundations - 400 kV Cable Ducts Installation - Pour Transformer Bund Foundations	Kilwex Construction	Section 4.2	
				400 kV Building Construction: - Structural Steel Frame - Composite Cladding - First Floor - Internal Finishes, Building Services			
			400 kV Transformer Bund: - Bund Walls - Bund Testing - Blast Walls installation - Blockwork Sumps & Covers, Drainage stone				
			Landscaping - Berm Planting with native Irish trees - Wetland Planting in ponds - Revegetation planting - Landscape in accordance with permitted design				
Part 2	Electrical Installation Phase 1	Installation of 110 kV Switchgear in completed 110 kV Building	(indicative) Stage 1: Install Switchgear & Testing Stage 2: Commission Switchgear, Underground Cable installation & Terminations Stage 3: Energise 110 kV Substation		To be Awarded		
	Electrical Installation Phase 2	Installation of 400 kV Switchgear in completed 400 kV Building.	(indicative) Stage 1: Install Switchgear & Testing Stage 2: Commission Switchgear, Underground Cable installation & terminations Stage 3: Energise 400 kV Substation		To be Awarded		
	Transformer Delivery & Installation	Delivery and installation of 400 kV Transformers	(indicative) Stage 1: Delivery & Offload Stage 2: Assemble & Fill Stage 3: Commission Stage 4: Energisation of 400 kV Transformer		To be Awarded		
Operation of Unit 1 Coolnabackey Substation	Interfacing & Tying in of Other Units on Laois Kilkenny Project. (Construction phases of Units 2 & 8 to overlap with unit 1)	Overhead Line Diversions from Athy Portlaoise 110 kV OHL (Unit 8)			To be Awarded		
		Overhead Line Diversions from Dunstown Moneypoint 400 kV (Unit 2)			To be Awarded		
		Substation Operation & Maintenance			ESB Networks	N/A	

Coolnaback Unit 1- Indicative Development Programme

ID	Task Name	Duration	Start - Month	Finish - Month																													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
1	Coolnaback - Stages of Development	29 mons?	Month 1	Month 29																													
2	Unit 1: Borehole Decommissioning & Installation	1 mon	Month 1	Month 2																													
3	Civil Construction *Outline Programme- timing and durations subject to change during construction.	19 mons	Month 1	Month 17																													
4	Main Civil Construction Phase 1	12 mons	Month 1	Month 7																													
5	Earthmoving Stage 1: Site Preparation	1 mon	Month 1	Month 1																													
6	Earthmoving Stage 2: Site Establishment	2 mons	Month 1	Month 2																													
7	Earthmoving Stage 3: Excavate Ponds and Associated Drainage	2 mons	Month 2	Month 5																													
8	Earthmoving Stage 4: Construct Drainage ponds & Associated Infrastructure	3 mons	Month 3	Month 6																													
9	Earthmoving Stage 5: 110 kV Building Footprint Excavation Works	2 mons	Month 5	Month 7																													
10	Earthmoving Stage 6: Remainder of Civils & Excavation works	5 mons	Month 7	Month 11																													
11	110kV Building Construction	6 mons	Month 7	Month 12																													
12	Main Civil Construction Phase 2	10 mons	Month 8	Month 18																													
13	400 kV Excavations	2 mons	Month 8	Month 10																													
14	400kV Foundation and Ducting	2 mons	Month 10	Month 12																													
15	400 kV Building Construction	8 mons	Month 11	Month 18																													
16	400 kV Transformer Bund	10 mons	Month 8	Month 18																													
17	Landscaping	2 mons	Month 17	Month 18																													
18	Electrical Construction *Programme Subject to Contract award	18 mons	Month 11	Month 29																													
19	Electrical Construction Phase 1	12 mons	Month 11	Month 23																													
20	Stage 1: Install 110kV Switchgear & Testing	9 mons	Month 11	Month 20																													
21	Stage 2: Commission 110kV Switchgear, Install Underground Cables & Terminations	3 mons	Month 20	Month 23																													
22	Stage 3: Energise 110 kV Substation	0 mons	Month 23	Month 23																													
23	Electrical Construction Phase 2	12 mons	Month 17	Month 29																													
24	Stage 1: Install 400kV Switchgear & Testing	9 mons	Month 17	Month 25																													
25	Stage 2: Commission 400kV Switchgear, Install Underground Cables & Terminations	3 mons	Month 25	Month 28																													
26	Stage 3: Energise 400 kV Substation	0 mons	Month 28	Month 28																													
27	Transformer Delivery & Installation *Programme Subject to Contract award	4 mons	Month 25	Month 29																													
28	Stage 1: Delivery & Offload	1 mon	Month 25	Month 26																													
29	Stage 2: Assemble & Fill	2.5 mons	Month 25	Month 28																													
30	Stage 3: Commission	1 mon	Month 28	Month 29																													
31	Stage 4: Energisation of 400 kV Transformer	0 mons	Month 29	Month 29																													
32	Operation of Unit 1 Coolnaback Substation	13.05 mons?	Month 17	Month 28																													
33	Interfacing & Tying in of Other Units on Laois Kilkenny Project. (Construction phases of Units 2 & 8 to overlap with Unit 1)	3 mons	Month 17	Month 20																													
34	Overhead Line Diversions from Dunstown Moneypoint 400 kV (Unit 2)	3 mons	Month 25	Month 28																													
35	Substation Operation & Maintenance		Month 23	End of Life																													