

附件一 Appendix 1

一、 作業範圍 (Construction Area)

本作業包含陣列海纜鋪設、風場安裝支援如調查及海纜埋設，區域為中能離岸風場海纜廊道及風場內部範圍，範圍內海域水深約在4公尺至40公尺間，如圖1中標示範圍，風場及海纜廊道邊界座標點如表1及表2所示。

The operation includes inter array cable laying, installation support such as survey and cable burial. The area is composed of Zhong Neng Offshore Cable Corridor and Wind Farm Site, where the water depth is about 4 to 40 meters. The area is shown in Figure 1, and the boundary coordinates of wind farm and cable corridor are listed in Table 1 and Table 2.

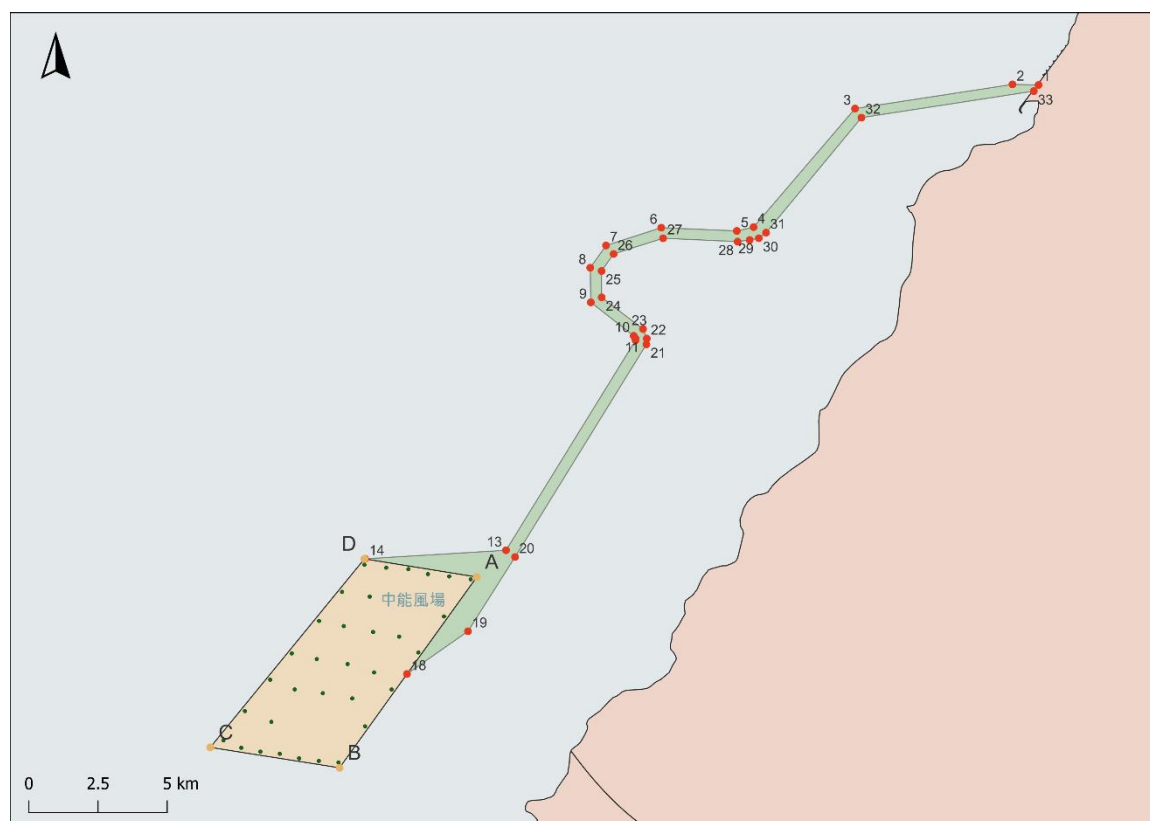


圖1、本計畫工作區域 Figure 1 ZN project area

表1、風場範圍邊界座標點位

Table 1 The boundary of wind farm

ID	WGS 84		TWD 97	
	Long (X座標)	Lat (Y座標)	X	Y
A	120°11'12.975"	23°55'41.034"	167229.94	2647294.79
B	120°8'17.735"	23°51'37.22"	162228.58	2639823.19
C	120°5'32.554"	23°52'3.309"	157560.04	2640655.02
D	120°8'49.502"	23°56'4.233"	163176.93	2648032.43

表2、海纜廊道邊界座標點位

Table 2 The boundary of cable corridor

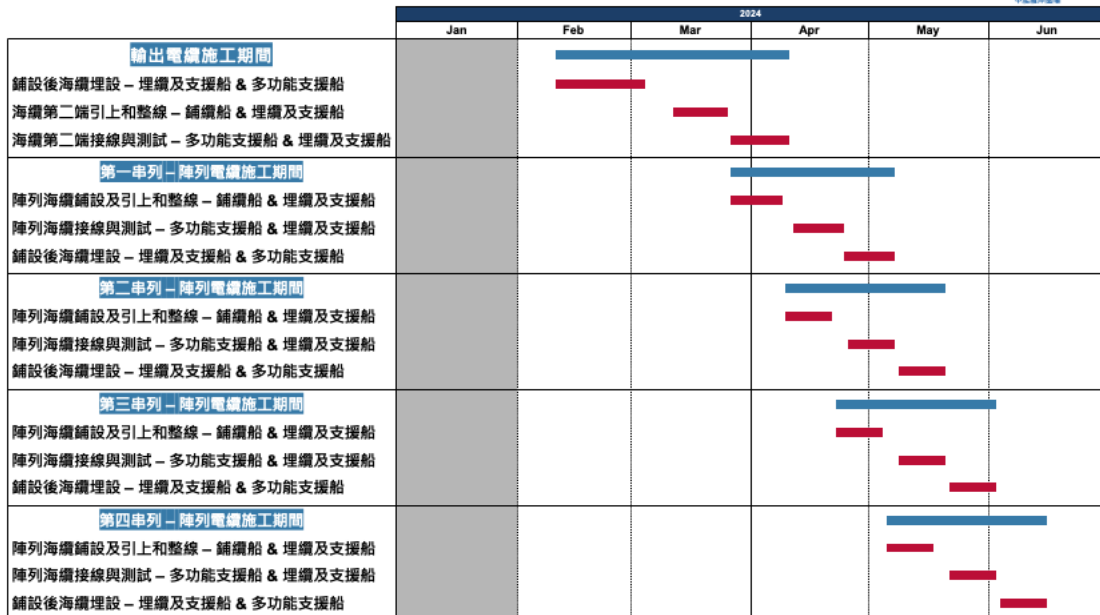
ID	WGS 84		TWD 97	
	Long (X座標)	Lat (Y座標)	X	Y
1	120°23'10.669"	24°6'9.908"	187609.75	2666539.16
2	120°22'37.295"	24°6'10.617"	186667.37	2666565.15
3	120°19'16.227"	24°5'39.705"	180984.56	2665640.47
4	120°17'6.619"	24°3'8.229"	177300.41	2660998.49
5	120°16'45.25"	24°3'3.377"	176695.94	2660852.30
6	120°15'8.667"	24°3'7.468"	173967.92	2660992.42
7	120°13'58.158"	24°2'44.746"	171972.12	2660304.09
8	120°13'37.94"	24°2'16.311"	171396.07	2659432.44
9	120°13'38.67"	24°1'32.079"	171409.23	2658071.52
10	120°14'33.507"	24°0'49.277"	172951.72	2656746.28
11	120°14'35.831"	24°0'45.755"	173016.82	2656637.58
12	120°14'35.886"	24°0'43.688"	173018.01	2656573.97
13	120°11'50.357"	23°56'15.239"	168293.03	2648341.04
14	120°8'50.302"	23°56'4.3"	163199.56	2648034.35
D	120°8'49.502"	23°56'4.233"	163176.93	2648032.43
A	120°11'12.975"	23°55'41.034"	167229.94	2647294.79
18	120°9'43.858"	23°53'37.081"	164687.16	2643496.08
19	120°11'1.771"	23°54'31.648"	166900.77	2645161.96
20	120°12'1.967"	23°56'6.619"	168619.85	2648073.99
21	120°14'49.711"	24°0'38.412"	173407.85	2656409.57
22	120°14'50.22"	24°0'45.763"	173423.45	2656635.63
23	120°14'45.348"	24°0'57.932"	173287.78	2657010.76
24	120°13'52.574"	24°1'38.443"	171803.20	2658265.13
25	120°13'52.42"	24°2'12.148"	171804.51	2659302.10
26	120°14'7.859"	24°2'33.908"	172244.39	2659969.17
27	120°15'11.034"	24°2'53.951"	174032.61	2660576.19
28	120°16'46.209"	24°2'49.676"	176720.87	2660430.65
29	120°17'1.624"	24°2'51.743"	177156.70	2660492.02
30	120°17'13.358"	24°2'54.015"	177488.57	2660560.24
31	120°17'22.574"	24°3'1.079"	177750.03	2660776.24
32	120°19'24.398"	24°5'28.086"	181213.60	2665281.90
33	120°23'4.6"	24°6'2.002"	187437.28	2666296.69

二、作業時間表(Construction period)

本計畫船舶預計作業期程為113年3月10日至 113 年 6月 30日，惟此期程將依照現場施工或海氣象條件而有所變動。

The estimated vessel operation duration of this project is from 2024.03.10 to 2024.6.30, which will vary with actual operation situation and weather condition.

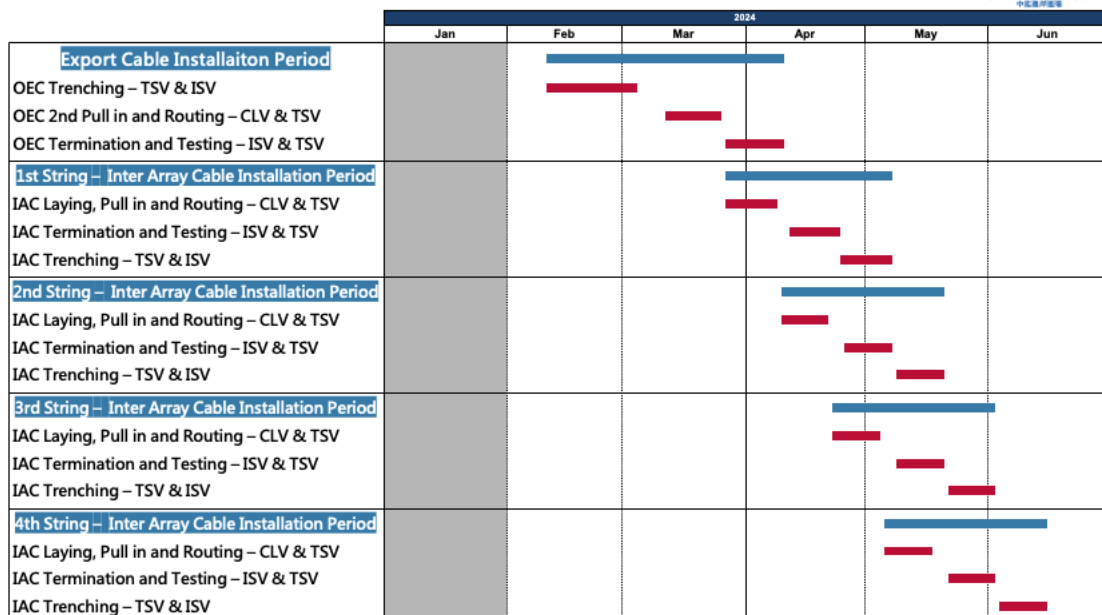
中能風場 2024離岸輸出及陣列電纜施工排程(1/2)



Note:
灰色區域表示台灣海峽 非施工氣候窗期

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ZN 2024 Offshore Export and Inter Array Cable Installation Schedule (1/2)



中能風場 2024離岸輸出及陣列電纜施工排程(2/2)



Click to add subtitle or unit of measure

輸出電纜施工期間	2024/02/11	2024/04/11
鋪設後海纜埋設 – 埋纜及支援船 & 多功能支援船	2024/02/11	2024/03/05
海纜第二端引上和整線 – 鋪纜船 & 埋纜及支援船	2024/03/12	2024/03/26
海纜第二端接線與測試 – 多功能支援船 & 埋纜及支援船	2024/03/27	2024/04/11
第一串列 – 陣列電纜施工期間	2024/03/27	2024/05/08
陣列海纜鋪設及引上和整線 – 鋪纜船 & 埋纜及支援船	2024/03/27	2024/04/09
陣列海纜接線與測試 – 多功能支援船 & 埋纜及支援船	2024/04/12	2024/04/25
鋪設後海纜埋設 – 埋纜及支援船 & 多功能支援船	2024/04/25	2024/05/08
第二串列 – 陣列電纜施工期間	2024/04/10	2024/05/21
陣列海纜鋪設及引上和整線 – 鋪纜船 & 埋纜及支援船	2024/04/10	2024/04/22
陣列海纜接線與測試 – 多功能支援船 & 埋纜及支援船	2024/04/26	2024/05/08
鋪設後海纜埋設 – 埋纜及支援船 & 多功能支援船	2024/05/09	2024/05/21
第三串列 – 陣列電纜施工期間	2024/04/23	2024/06/03
陣列海纜鋪設及引上和整線 – 鋪纜船 & 埋纜及支援船	2024/04/23	2024/05/05
陣列海纜接線與測試 – 多功能支援船 & 埋纜及支援船	2024/05/09	2024/05/21
鋪設後海纜埋設 – 埋纜及支援船 & 多功能支援船	2024/05/22	2024/06/03
第四串列 – 陣列電纜施工期間	2024/05/06	2024/06/15
陣列海纜鋪設及引上和整線 – 鋪纜船 & 埋纜及支援船	2024/05/06	2024/05/18
陣列海纜接線與測試 – 多功能支援船 & 埋纜及支援船	2024/05/22	2024/06/03
鋪設後海纜埋設 – 埋纜及支援船 & 多功能支援船	2024/06/04	2024/06/15

三、 作業船舶 (Construction vessels)

本專案將動員鋪纜船及多功能支援船如下所述：

Following vessels (cable laying vessel and support vessel) will be mobilised for the Scope of Work

鋪纜船基本資訊 Vessel Information	
	
Name	Seaway Phoenix
Call sign:	2EEZ6
IMO No:	9250529
MMSI:	235084529
Vessel Type	Cable Layer
Nationality	Isle of Man
Length & Breadth	129.9m * 27.8m
Draft	4.8~8.4m
攜帶儀器列表 Equipment List	
Turntable	2x 2,000t turntables
Offshore crane	1 x AHC 34t offshore crane
Trenching ROV	1x Trenching ROV
ROVs	2 x WROVs

多功能支援船基本資訊 Vessel Information



Name	Komodo
Call sign:	9HA4961
IMO No:	9328273
MMSI:	515111000
Vessel Type	Survey, PLGR, CFE
Nationality	Malta
Length & Breadth	70.90m*16.00m
Draft	5.6m
攜帶儀器列表 Equipment List	
Offshore crane	30 t AHC offshore crane
Capstan	2 capstans, each 10 Te
Winches	2 tugger winches, each 10 Te

四、 預計航行路線 The planned sailing route

本計畫動員之船舶，預計於113年2月底3月初抵達台中港，於港口進行清關及動員作業後，行駛至中能風場執行作業，而於海纜安裝期間，多數船隻將來往台中港，然少數情況船隻仍可能往返高雄港、安平港進行相關補給作業，如有緊急情況或氣候影響，則將會考量台中港及高雄港作為緊急避難港口。

The vessel mobilised for this plan is expected to arrive at Taichung Port from end of February to early March in 2024. After customs clearance and mobilisation operations at the ports, they will sail to Zhongneng Offshore Cable Corridor and Wind Farm Site to perform operations. During the cable installation, most of vessels will sail in and out Taichung Port, in some cases vessels will also sail to Kaohsiung Port or Anping Port for supply operations. In case of an emergency or weather sheltering requirements, Taichung Port and Kaohsiung harbor will be considered as emergency harbors of refuge.



圖2、本計畫船舶航行路線 Figure 2 The planned sailing route of ZN project