

檔 號：

保存年限：

海能風力發電股份有限公司 函

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受文者：交通部航港局中部航務中心

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速別：普通件

密等及解密條件或保密期限：


附件：船舶作業與相關資訊(附件一 2023062313_Attach1.pdf、附件二 2023062313_Attach2.docx)

主旨：為進行風場陣列電纜維修計畫，本公司預計執行海能風場陣列電纜區域海底調查工作，檢附工作時程及船舶資訊，請貴中心惠予發佈航船佈告，以維護航安，請查照。

說明：

- 一、本公司委託玉豐海洋科儀股份有限公司執行海能風場陣列電纜海底調查工作，作業期程預計112年7月1日至112年7月12日止，實際作業天數將視天候及調查進度調整。
- 二、船舶相關資訊如附件，煩請貴中心惠予發佈航船佈告，以維護航安，請查照。

正本：交通部航港局中部航務中心

副本：

交通部航港局中部航務中心



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船舶與作業相關資訊

Revision	Date	Status	Author	Checked	Approved
0	27 June 2023	Draft	Jensen Yan	Jensen Yan	Sebastien Husson

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1.0 目的 OBJECTIVES

本公司電纜維修計畫依規定提送相關資訊以利航政機關發布航船布告。本文包含航船布告所需之相關內容，若有資訊變更，將與航政機關保持更新。

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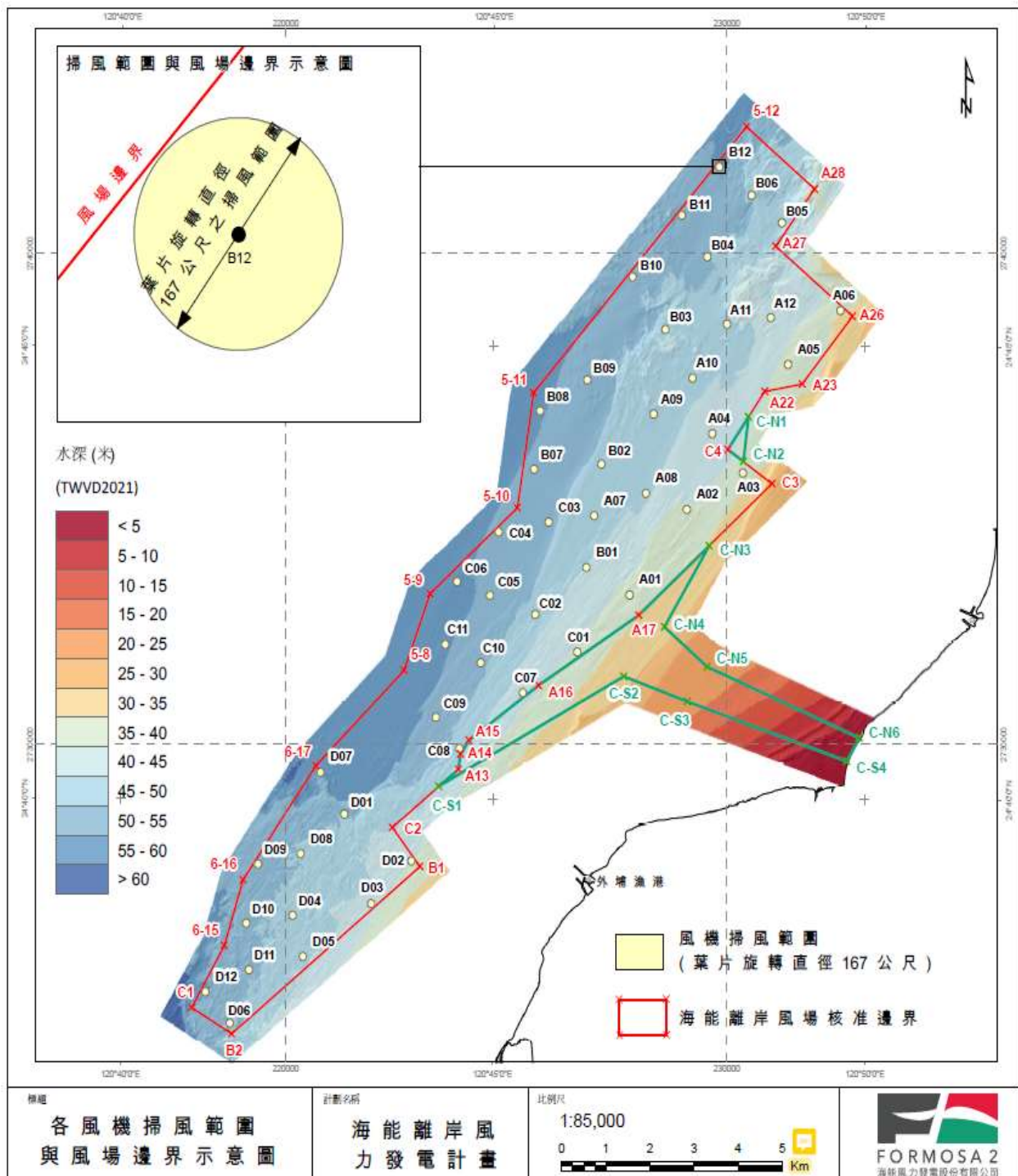
2.0 作業範圍 SITE AREA

2.1 作業區域 Layout of Site

下圖1可見其風場範圍（橘色與綠色框線內），關於此區之座標請詳見Table 1。

Survey area as shown in below (outlined with orange and green), detail coordinates please see Table 1.

Figure 1 Offshore windfarm boundary and survey area 風場位置圖及調查範圍



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Figure 2 Survey area 調查範圍



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2.2 風場邊界座標資訊 Coordinate of Site Boundary

詳細座標如下表所示。The coordinate information is as below.

Table 1 Coordinate of Site Boundary 風場範圍座標

WTG JACKET CENTRE AS-BUILT COORDINATES				
WTG ID	TWD97/TM2/ZONE 121		WGS1984	
	EASTING (m)	NORTHING (m)	X (D.ddddddd)	Y (D.ddddddd)
A01	227800.751	2733043.073	120.780600	24.704294
A02	229098.360	2734783.433	120.793399	24.720025
A03	230369.238	2735525.852	120.805950	24.726745
A04	229675.652	2736328.485	120.799082	24.733983
A05	231394.443	2737736.314	120.816055	24.746716
A06	232580.182	2738833.069	120.827764	24.756632
A07	226997.836	2734656.586	120.772638	24.718850
A08	228169.802	2735110.599	120.784215	24.722966
A09	228346.977	2736725.959	120.785941	24.737553
A10	229228.899	2737460.896	120.794649	24.744201
A11	230010.585	2738555.916	120.802362	24.754098
A12	231001.703	2738690.245	120.812159	24.755324
B01	226820.152	2733602.142	120.770899	24.709327
B02	227163.025	2735707.916	120.774253	24.728345
B03	228614.819	2738448.010	120.788563	24.753105
B04	229565.919	2739927.083	120.797945	24.766472
B05	231253.801	2740619.910	120.814626	24.772749
B06	230566.908	2741181.207	120.807826	24.777808
B07	225634.961	2735601.469	120.759150	24.727360
B08	225772.728	2736789.997	120.760491	24.738093
B09	226843.586	2737422.937	120.771067	24.743824
B10	227867.237	2739518.013	120.781154	24.762755
B11	228986.824	2740775.300	120.792206	24.774122
B12	229838.022	2741756.688	120.800609	24.782994
C01	226614.331	2731882.757	120.768893	24.693800
C02	225662.327	2732645.413	120.759472	24.700671

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C03	225967.538	2734523.992	120.762456	24.717637
C04	224834.711	2734324.022	120.751262	24.715813
C05	224636.531	2733034.050	120.749327	24.704163
C06	223889.979	2733313.597	120.741943	24.706675
C07	225379.424	2731052.231	120.756704	24.686282
C08	223942.511	2729918.761	120.742526	24.676025
C09	223412.734	2730551.114	120.737279	24.681725
C10	224424.852	2731660.548	120.747260	24.691759
C11	223621.417	2732035.809	120.739313	24.695133
D01	221334.259	2728583.093	120.716781	24.663919
D02	222851.561	2727626.033	120.731790	24.655305
D03	221942.308	2726757.771	120.722825	24.647450
D04	220160.535	2726520.618	120.705228	24.645275
D05	220392.855	2725681.621	120.707540	24.637704
D06	218735.995	2724326.532	120.691204	24.625437
D07	220792.071	2729432.091	120.711406	24.671574
D08	220342.237	2727776.222	120.706996	24.656615
D09	219376.818	2727565.677	120.697463	24.654695
D10	219109.634	2726360.211	120.694850	24.643806
D11	219168.747	2725412.165	120.695455	24.635248
D12	218185.435	2724963.167	120.685752	24.631174

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3.0 作業時間表 Milestone Sheet

預定作業時程 Expected Operation Period: 自 112 年 7 月 1 日起至 112 年 7 月 12 日止

Table 2 作業時間表 Milestone Sheet

編號 (No.)	開始時間 From	結束時間 to	作業內容 Description
1	01.07.2023.	12.07.2023.	Inter-array cable seabed area survey between WTG B11 and B12.

上列作業時間及作業內容供參考(實際作業期間將隨作業進度及海象而調整)

The above is for information only. The actual schedule will be changed as the weather and situation dictates

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4.0 船舶基本資料 VESSEL INFORMATION

4.1 Vessel 1：航安字第 016576 號

船名 Vessel Name	Sunny Bright
船籍港 Home Port	Taiwan / Kaohsiung
總噸數 Gross Tonnage	1358 Mt
船長 LOA	53.80 m
船寬 Width	13m
IMO	9668520
MMSI	416254700



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5.0 特殊設備 SPECIALTY EQUIPMENT

向陽山號 Sunny Bright

Item	設備 Equipment	型號 Specification	用途 Purpose
1.	DP Class 1 system	-	-
2.	Stern A-Frame (10T@ 3m r)	-	-
3.	ROV with umbilical	-	-

- STS MK1 GREMLIN 3" Dredger
- Hydro LEK HLK-4600
- Trittech Gemini 720 is
- R2 sonic 2024 Multibeam Echo
- Sonardyne usbl transponder 8271
- Sonardyne Mini-Ranger 2 USBL
- Teledyne TSS HydroPACT 440 Pipe
- Valeport Model 803 ROV
- Imenco Tiger Shark Camera
- Valeport Mini Sound Velocity
- Valeport Mini Intelligent Pressure Sensor
- Valeport MIDAS SVX2 Combined CTD/SVP (300B
- iXblue ROVINS Inertial
- ROS PT-10 Pan and Tilt Unit
- B&W Camera Kongsberg
- Lateral FlexiClean
- Valeprot Altimeter VA500
- WaterJet Hdoro-LED HLK-31020
- Nortek DVL1000
- Hydro lek EH5
- Hydro lek HD5

Figure 3 Relevant equipments 相關設備

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6.0 緊急聯絡人與專案負責人 EMERGENCY CONTACT INFORMATION

6.1 專案公司 Project company: 海能風力發電股份有限公司 FORMOSA 2 WIND POWER CO., LTD.

專案公司 Project company			
職位 Position	公司 Company	姓名 Name	電話 Mobile Phone
海事協調中心	海能風力發電股份有限公司	OCC	+886 966 138 536 04 2388 9003 ext. 1
運營工程師	海能風力發電股份有限公司	顏鈺承	+886 909 365 833
運營工程經理	海能風力發電股份有限公司	Sebastien Husson	+886 966 118 763
施工經理	海能風力發電股份有限公司	Ben Cranie	+886 979 665 683

6.2 海事工程公司 Contractor: DWTEK Co, Ltd. 玉豐海洋科儀股份有限公司

工程公司 Contractor			
DWTEK Co, Ltd.			
職位 Position	公司 Company	姓名 Name	電話 Mobile Phone
專案經理	DWTEK Co, Ltd.	Vivian Lee	+886 4 3502 4890 ext. 644

6.3 船舶營運商 Vessel Operator: DWTEK Co, Ltd. 玉豐海洋科儀股份有限公司

船舶聯絡人 Vessel Contact				
船名 Vessel	職位 Position	公司 Company	姓名 Name	電話 Mobile Phone
向陽山號 Sunny Bright	船長	-	Tsai Pei Yun	+886 9 7202 2967
	運營工程經理	DWTEK Co, Ltd.	Tim Jhou	+886 4 2211 0890 ext. 101
	專案經理	DWTEK Co, Ltd.	Polly Lin	+886 4 3502 4890 ext. 649

航船布告

中華民國 112 年 XX 月 XX 日

目的 礙航公告(中區)(112 年 7 月 1 日至 7 月 12 日)海能風力發電股份有限公司「海能風場之調查船作業」相關資訊。

依據 海能發電股份有限公司 112 年 6 月 27 日能 T 字第 2023062313 號

說明 海能風場海底調查作業以向陽山號(Sunny Bright)，工作船執行輸出海纜區域海底探勘相關調查工作，作業期間為 112 年 7 月 1 日至 7 月 12 日，非旨述計畫相關之工作船隻，敬請避開該區域，注意航行以策安全，相關資料詳如附件。

位置 調查邊界範圍如下，

WTG ID	WGS1984	
	X (D°M'S.sss")	Y (D°M'S.sss")
A01	24° 42' 15.458"	120° 46' 50.159"
A02	24° 43' 12.091"	120° 47' 36.235"
A03	24° 43' 36.283"	120° 48' 21.421"
A04	24° 44' 2.338"	120° 47' 56.697"
A05	24° 44' 48.176"	120° 48' 57.798"
A06	24° 45' 23.874"	120° 49' 39.952"
A07	24° 43' 7.860"	120° 46' 21.496"
A08	24° 43' 22.679"	120° 47' 3.174"
A09	24° 44' 15.192"	120° 47' 9.389"
A10	24° 44' 39.124"	120° 47' 40.737"
A11	24° 45' 14.753"	120° 48' 8.502"
A12	24° 45' 19.165"	120° 48' 43.773"
B01	24° 42' 33.577"	120° 46' 15.236"
B02	24° 43' 42.040"	120° 46' 27.313"
B03	24° 45' 11.178"	120° 47' 18.826"
B04	24° 45' 59.299"	120° 47' 52.602"

B05	24° 46' 21.896"	120° 48' 52.653"
B06	24° 46' 40.109"	120° 48' 28.172"
B07	24° 43' 38.496"	120° 45' 32.940"
B08	24° 44' 17.135"	120° 45' 37.769"
B09	24° 44' 37.767"	120° 46' 15.843"
B10	24° 45' 45.918"	120° 46' 52.156"
B11	24° 46' 26.841"	120° 47' 31.942"
B12	24° 46' 58.780"	120° 48' 2.193"
C01	24° 41' 37.680"	120° 46' 8.016"
C02	24° 42' 2.416"	120° 45' 34.099"
C03	24° 43' 3.493"	120° 45' 44.842"
C04	24° 42' 56.928"	120° 45' 4.545"
C05	24° 42' 14.988"	120° 44' 57.577"
C06	24° 42' 24.029"	120° 44' 30.996"
C07	24° 41' 10.616"	120° 45' 24.134"
C08	24° 40' 33.689"	120° 44' 33.092"
C09	24° 40' 54.210"	120° 44' 14.204"
C10	24° 41' 30.332"	120° 44' 50.136"
C11	24° 41' 42.480"	120° 44' 21.527"
D01	24°39' 50.108"	120°43' 0.410"
D02	24°39' 19.099"	120°43' 54.445"
D03	24°38' 50.819"	120°43' 22.168"
D04	24°38' 42.990"	120°42' 18.820"
D05	24° 38' 15.736"	120° 42' 27.146"
D06	24°37' 31.573"	120°41' 28.335"
D07	24°40' 17.667"	120°42' 41.062"
D08	24°39' 23.814"	120°42' 25.187"
D09	24°39' 16.903"	120°41' 50.867"
D10	24° 38' 37.702"	120° 41' 41.460"
D11	24°38' 6.891"	120° 41' 43.637"
D12	24°37' 52.225"	120°41' 8.706"

NOTICE TO MARINERS

XXXX XX 2023

Objective Obstruction Notice (Central Area) (1st July 2023 to 12th July 2023) FORMOSA 2 WIND POWER CO., LTD. 「 Seabed survey operations of Inter-Array Cable Area, Formosa 2 」 .

Source Formosa 2 Offshore Wind Farm, letter No. dated June.

Details Formosa 2 offshore wind farm will start seabed survey for Inter-Array Cable Area between WTG B11 and B12 from 1st July,2023 till 12th July,2023. Mariners are advised to navigate with caution in the area.

Position Area of coverage:

WTG ID	WGS1984	
	X (D°M'S.sss")	Y (D°M'S.sss")
A01	24° 42' 15.458"	120° 46' 50.159"
A02	24° 43' 12.091"	120° 47' 36.235"
A03	24° 43' 36.283"	120° 48' 21.421"
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