



PROGETTO PER LA REALIZZAZIONE DI UN IMPIANTO PER LA PRODUZIONE DI ENERGIA MEDIANTE LO SFRUTTAMENTO DEL VENTO NEL MARE ADRIATICO MERIDIONALE - BARIUM BAY 74 WTG – 1.110 MW

PROGETTO DEFINITIVO - SIA





				RE	FERENCE	DOCUME	NTS				
REF			DOC T	AG			DE	ESCRIP	ΓΙΟΝ		
											A
											В
					LEG	ENDA					
											С
	-	-*	CIRCUIT B	REAKER							
		<u>/</u> ⊢	DISCONNEC	CTOR							
		/	HIGH SPEI	ED EARTHI	NG SWITCH						
	SURGE ARRESTER									D	
	VOLTAGE TRANSFORMER										
	CURRENT TRANSFORMER									\vdash	
	/										
			STEP-UP	TRANSFORM	MER WITH O	N-LOAD TA	P CHANGER	(OLTC)			
		\square									E
	(\square									
			AUXILIARY	TRANSFOR	MER WITH N	O-LOAD TA	P CHANGER	(NLTC)			-
	·	\checkmark									
		WTs	WIND TURE	BINE STRIN	G						F
	-		FUSE								ľ
	-(=										
	-	- <u> </u>	EARTHING	BLADES							
CIRCUIT BREAKER WITH AUTOMATIC TRIPPING											
		ATS	AUTOMATIC	TRANSFER	R SWITCH						G
	ZIGZAG GROUNDING AUTO-TRANSFORMER WITH NEUTRAL EARTHING-RESISTOR										
	¥										
		\square	BUS DUCT								
NO ^r	TES:	n of o uno o u	cinc ic r		The part		otion. ind				Н
(1) (2)) Shi wh	int React ole HV ca	ors size ble charg	is prelin ging curr	ninary. Cu ent throu	urrently gh shunt	it is supp reactors	posed t installe	o compensate ed on the off	e the shore	
	sub ins	station. talled ons	To be fu shore, als	urther ev so based	valuated on cable	if one o selectior	f the tw n. In addi	o shun tion, p	t reactors n lease note th	naybe at in	
(3	ord ava) Opt	er to co ilable shu ional	int react	wnole r or sizes,	n°2 shunt	compensa c reactors	s have be	r and en fore	seen.	arket	
(4) Nui sid	mber of e.	strings ta	aken froi	m .kmz f	ile sent	from Hop	e, star	ting from the	e left	
(5) In clo	case of f sed, in o	ault at l rder to	ine L2, c export t	ircuit bre he availal	aker 152 ble power	L2 is oper r from SU	ned and UBSTATI	d coupler 124 ON 2 from L	_2 is 1 (L1	L
	anc ele tak	l L2 bot ctrical sy en out o	h designe stem cor f operatio	ed for 5 nfiguratio on.	0% of th n, the Va	e whole riable Sh	project i nunt Reac	rated p tors #3	oower). Under 3 and #4 sha	this Il be	
(6) In no	case of f more exp	ault at li port from	ne L3, ci 1 Substat	ircuit brea ion 2 is p	akers 152 possibile.	L3_1 and	152L3_	2 are opened	, and	
(7) It (bar par	has been · configur ·allel Bas	considerer ation RTN ed on th	ed that e N HV SUE at the i	export line SSTATION, 1 Poluded A	es L1 and meaning TS only a	L2 are i that L1 a:	nserted nd L2 (followi	on double b can not be in	us	
	par a c	anci: Das 159L1 ar ondition);	nd 159L2	closed, w	while 124_	2 opened	(normal	operati	ng		
	b C	0.159L1 ar .159L2 ar	nd 124_2 nd 124_2	closed, v closed, v	while 159L while 159L	2 opened 1 opened	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;				
	C		oguz and	124_2 0	penea.						
gwg	02	15/06/2023	SD	РВ	MT	UPDATED	BASED ON C	LIENT CC	OMMENTS		
OT 13/00/2023 SD PB MT OF DATED BASED ON CL 00 09/06/2023 SD PB MT FIRST ISSUE Rev. Date Created by Checked by Approved by Description Customer Barium Bay Srl Project Barium Bay Offshore Substations							JE	-			
							ostations		Customer Documer	nt ID	
	Project 1208	Project ID 12085 POWERED BY HOPE GROUP AND GALILED			ReplacingBased onScaleFormat1:XXA0					mat A0	
Responsible Department Created by Checked by - Sergio Daliani-Poli Pietro Belloni							Approved by Mauro Tavola				
1-0007								Document			
							12085-E Rev.	_BG-001 Rel. Date	Page		
File 1		757	ELDI		KKS-NO.: -				30/06/2023	1/2	1



EF			DOC T	REI AG	FERENCE	DOCUMEI	NTS DE	ESCRIP	TION	
-										- A
										_ B
					IFG	FNDA				
										- c
	:									
	HIGH SPEED EARTHING SWITCH									
	—	SURGE ARRESTER								
	\oplus current transformer									
			STEP-UP T	RANSFORME	R WITH ON-	–LOAD TAP	CHANGER (OLTC)		
										E
		\square								
			AUXILIARY T	RANSFORME	R WITH NO	-LOAD TAP	CHANGER ((NLTC)		
	TAN	 								
		1 S 3~ V	VIND TURBII	NE STRING						F
	CIRCUIT BREAKER WITH AUTOMATIC TRIPPING									
		ats A	AUTOMATIC	TRANSFER S	SWITCH					G
	(ZIGZAG GROUNDING AUTO-TRANSFORMER WITH NEUTRAL EARTHING-RESISTOR								
		÷ II r	DUC DUCT							
	ROS DUCT									
NO] (1) (2)	TES: Tra Shi	nsformer Int React	size is p ors size	preliminar is prelim	y. Transfo Junary Cu	ormer loc urrently i	ation: ind	oor.	o compensate the	
(~)	who sub	ole HV ca station.	ble charg To be fu	ging curre	aluated i	gh shunt f one of	reactors f the two	install shur	ed on the offshore at reactors maybe	
	ord ava	er to co ilable shu	over the int reacto	whole re or sizes,	equired c n°2 shunt	reactors	ted power have bee	r and en fore	based on market	
(3)	0pt (Nur (side	ional. nber of a e.	strings ta	aken fron	n .kmz fi	le sent f	from Hope	e, star	ting from the left	
(5)) In clos	case of f sed, in o	ault at li rder to	ne L2, ci export th	rcuit brea ne availab	aker 152I ble power	L2 is open from SU	ned and JBSTATI	d coupler 124_2 is ION 2 from L1 (L1	L
	eleo tak	etrical sy	stem con f operatic	figuration	n, the Va	riable Sh	unt React	tors #:	3 and #4 shall be	
(6)) In no) It 1	case of fa more exp has been	ault at li port from consider	ne L3, cii Substati ed that	rcuit brea on 2 is p export lir	ikers 1521 oossibile. ies L1 ar	L3_1 and nd L2 are	152L3_	$_2$ are opened, and ted on double bus	
	bar configuration RTN HV SUBSTATION, meaning that L1 and L2 can not be in parallel. Based on that, the included ATS only allows the following conditions:									
	condition); b.159L1 and 124_2 closed, while 159L2 opened;								М	
	c d	.159L2 ar .159L1, 15	nd 124_2 59L2 and	closed, w 124_2 op	oened.	1 opened;				
ה ה	02	30/06/2023	SD	PB	MT		AS INDICATE	.D		
л. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	01 15/06/2023 SD PB MT UPDATED BASED ON CLIENT COMMENTS 00 09/06/2023 SD PB MT FIRST ISSUE							JMMENIS	-	
	Rev. Date Created by Checked by Approved by Description									
2161110	Customer Project Customer Document ID Barium Bay Srl Project Customer Document ID							Customer Document ID		
Project ID Project ID 12085 POWERD BY HORE GROUP AND GALLED Responsible Department Created by						Scale Format 1:XX A0 Approved by				
	- Sergio Daliani-Poli Pietro Belloni Mauro Tavola Title Document ID							Mauro Tavola	_	
SINGLE LINE DIAGRAM 12085-EBG-001							EBG-001	P		
		767	ECOL	7	KKS-NO.: -			кеv. 02	Rei. Date Page 30/06/2023 2/2	

15

14

A
5
بح ا
$ \Sigma$

02 30/06/2023 2/2

16