UKCCS EMF Phase II External Sources: Page 1	Identifying Number A / B
I To be completed by the UKCCS: Details of Housel	nold
The purpose of the Phase II external sources questionnaire is and load conditions reported in the Phase I questionnaire are as	to confirm that the circuit configurations oplicable to Phase II.
Date and Time of 48-hour Phase II Measurement Day Month Year Hours Minutes Please use 24 hour clock Start Date Start Time (of first household spot measurement)	Day Month Year Hours Minutes Please use 24 hour clock End Date End Time (of last household spot)
Regional UKCCS Contact: Prof. Ray Cartwright, LRF Centre for	
17 Springfield Mount, Leeds LS2 91 Tel. (0113) 233 3909 Address of Household	NG.
	Postcode:
	rthing OS Map Sheet No. (1:50 000 series)
Regional Electricity Company:	
The REC needs to check that the information on the Phase I form relevant Phase I external sources questionnaire.	
Date form Day Month Year Date returned Day Month Year Date returned by REC	Date copy sent to NRPB

UKCCS	EMF Phase II External Sources: Page 2		Identifying I	Number [A/B
l To	o be completed by the REC: Check	of Phase I Det	tails				
REC Co	ontact:			+	· .	1	<u>.</u>
					<u> </u>		
	check the Phase I external sources det I measurement:	ails attached, a	nd compa	ire to t	hose fo	r the tim	e of the
	and the second of the second						
	rcuit information for the period of Phase lor Phase I?	II measurement	different	Please	tick: Ye	s No	Dor Kno
	Phase I circuit information no longer apease move to page 3 and complete the re		: II questio	nnaire			
no (Pl	hase I circuit information still applies):						•
	ere the local network and any external s hase I operating typically at Phase II m			Please	tick: Ye	s No	Dor Kno
			·				
							
We	ere line load data provided for Phase I?			Please t	ick: Ye	s No	
lf y	es (line load data provided for Phase	l, and Phase I d	ircuit i nf c	ormatic	on still	applies):	Knov
	Line load data are also needed for the the rest of the questionnaire; please marked *** onwards.						
lf n	no (line load data <u>not</u> provided for Pha	se I, and Phase	l circuit i	inform	ation st	ill applie	es):
	No further action is required. Please requestionnaire to the UKCCS contact.	etum the first two	pages of	this qu	uestion n	aire & the	Ph ase
any the	anks for your help with this study.						9 (4) (4) (4) (4) (4) (4) (4) (4) (4) (4)
any ma	anto for your neip with this study.						· . ·

^{*} Substations, underground cables. REC HV overhead lines, LV 3-phase distribution circuits.

UKCCS EMF Ph	pase // External Sources: Page 3 Identifying Number A / B
II To be co	mpleted by the REC: Details of External Sources
This section is u	sed to determine:
	re were any external sources (underground cables, overhead lines or three phase rouits) of interest near the address.
	they were operating typically at Phase II measurement.
Unless otherwise	e stated, all distances are to the centre of the home.
	re anything unusual about the local network, which might have leasurements unrepresentative? Please tick: Yes No Don't Know
If yes, please de	scribe:
	and the control of th
Substations: Is the	nere an operating substation within 20m of the location? Please tick: Yes No Don't
If yes to substant	tion: ubstation operating typically during Phase II measurement? Please tick: Yes No Don't Know
Distance (r	netres) from nearest point of substation to the centre of home:
Primary Voltage (kV	Circuits: Underground / Overhead (Please circle) Circuits: Underground / Overhead Voltage (kV) Circuits: Underground / Overhead (Please circle)
Separated Phase	g Underground Cables (33 kV and above):
At the time of the	d cables have conductors bundled together. We want only those with separated phases. Phase II survey, were there any separated-phase REC within 20m of the centre of the home? Please tick: Yes No Don't Know
	omplete for each circuit: all measured distances are of closest horizontal approach to centre-line of cable route.
Cable Circuit 1 Voltage (kV): 33 / 66 / 132	Distance from residence (m): Cable outage at Phase II date and time? Yes No NK
Cable Circuit 2 Voltage (kV): 33 / 66 / 132	Distance from residence (m): Cable outage at Phase II date and time? Yes No NK

Where there is more than one cable circuit present, Circuit 1 is the one closer to the address. If there are more than two cable circuits, please attach and complete a copy of this page.

UKCCS EMF Phas	se // External Sources: Page 4 Identifying Number Region Case No. A / B
II To be com	pleted by the REC: Details of External Sources (cont.)
	Overhead Lines: At any time during Phase II, ph voltage REC overhead lines within the following Please tick: Yes No Don't Know
132 or 66 kV design	n-rated at > 1200 A within 200 m 11 or 33 kV double circuit within 80 m 600 - 1200 A within 140 m or single circuit within 50 m < 600 A within 100 m
* ·•	nplete for each circuit: Il measured distances are of closest horizontal approach to centre-line of overhead line.
Line A Circuit 1 Voltage (kV): 11 / 33 / 66 / 132 Rating (A): <600 / 600-1200 / >1200	Distance from residence (m): Cable outage at Phase II date and time? Yes No NK
Line A Circuit 2 Voltage (kV): 11 / 33 / 66 / 132 Rating (A): <600 / 600-1200 / >1200	Distance from residence (m): Cable outage at Phase II date and time? Yes No NK
Line B Circuit 1 Voltage (kV): 11 / 33 / 66 / 132 Rating (A): <600 / 600-1200 / >1200	Distance from residence (m): Cable outage at Phase II date and time? Yes No NK
Line B Circuit 2 Voltage (kV): 11 / 33 / 66 / 132 Rating (A): <600 / 600-1200 / >1200	Distance from residence (m): Cable outage at Phase II date and time? Yes No NK
If there are Additional Informa	For double circuit lines, Circuit 1 is the one closer to the address. more than two overhead lines, please attach and complete a copy of this page.

UKCCS	5	// External Sources: Page 5	Identifying	Number		<u> </u>	4 / B
ii T	o be compl	eted by the REC: Details of External	Sources (cont.)	e godin		
Additio	nal Informat	ion (cont.):					
				<u> </u>			
				<u></u>			
		The state of the s					<u> </u>
Low Vo	ltage Three I	Phase Distribution Circuits					
Is there	a 3 phase L'	distribution circuit within 2m of the home	exterior wa	alls?			
If yes:				Please tick:	Yes	No	Don't Know
ls	the above ci	rcuit overhead phase separated (open wire)?	Please tick:	Yes	No	Don't Know
ls	the above ci	rcuit a mural (undereaves) attachment to th	ie res idenc	ce? Please tick:	Yes	No	Don't Know
ls	the above ci	cuit feeding other houses on Economy 7/V	Vhite Meter	r regimes? Please tick:		No	Don't Know
cir		vious reason (apart from E7/White Meter re a much higher average load during the nigh ay?		r the Please tick:	Yes	No	Don't Know
lf j	yes , please o	escribe:	. * .	<u> </u>			1.
· · · · · · · · · · · · · · · · · · ·							
.:					<u> </u>		
NGC Lir	nes and Cabl	es: Are there any National Grid lines of > within 400m of the household, or 132 lines within 200 m, or cables within 20	kV	Please tick:	Yes	No	Don't Know
If yes:							
Pleas e r	note that all n	neasured distances are of closest horizonta	l approach	to centre	of lines.		
		Voltage (circle as appropriate)		<u>R</u>	<u>Distan</u> Residenc	ce From e (in metr	
Line / C	Cable	132 kV / 275 kV / 400 kV / Other:		_	. [
Line / C	Cable	132 kV / 275 kV / 400 kV / Other:		_			
Line / C	Cable	132 kV / 275 kV / 400 kV / Other:		_			

Please supply the UKCCS with a copy of a 1:2500 (or less) map with residence circled, which they will then pass on to the NGC representative.

*						Regio	n _ Case No		
UKCCS E	EMF Phase II E	xternal Sour	ces: Page 6		Identifying	y Number			A/B
III To	be completed	by the RE	C: Line Lo	ad Data			· · · · · · · · · · · · · · · · · · ·	1, (1	
If no REC	C underground c	ables or ove <u>r</u>	<u>head lines w</u>	<u>ere identified</u>	d in <u>Section I</u>	I, this sectio	n <u>can b</u> e i	gnore	<u>d.</u>
If there w	as more than o	ne lin e or ca l	ble, then ple	ase complet	te a separat	e copy of p	ages 6 ai	nd 7.	
Type of c	<u>ircuit:</u> Ov er he	ad Line / S	eparated Ph	ase Underg	round Cable	e (Please	circle)		
		head Line: dard tower ty	ype (e.g. L1	32, PL16, S	2, etc.)			·	
	Cond	luctor name:				or Cross-s	ectional		
	(e.g.	Lynx)				area (n	1)		
	cond If Unde	e does not ha uctors, with d rground cal	limensions a b le: (separat	nd phases, to e-phase cabl	ogether with les only)	position of r	esidence.		
	Pleas	se supply ske	tch showing	relative local	tion of condu	ictors, with c	limension	s & pr	nases.
<u>Informati</u>	on Needed for	<u>Load Data l</u>	<u>Decision</u>						
⇒ Operati	ng voltage rating	g (kV):		⇒ Design ra (Please tick		< 600	1200] >1	200
⇒ Horizor	ntal distance (m) from centre	of home to	centre-line	of cable or c	overhead lin	e (from p	. 3)	
	If distance be								
) of lowest o							
	This can be floor of the	e measured or lowest norma evel (e.g. cable	obtained from	records. The	height sho uld	d be given re			
Circuit Pha	asing: (for doub	le circuit line	s or cables	nlv):					
	Please indicat				o to bottom	or left to rig	ht)	: .	
	Circuit 1:	R 🔲	Y B	B C	R 🔲	Y 🔲	В []	
		В	Ř	Ÿ	Ÿ	B	Ŕ		. At
	Circuit 2:	R 🗌 Y	Y D	B R	R 🔲 B	Y 🗌 R	ВГ]	
		В	R	Y	Υ	В	R		
	The line or cable	e is <u>transpose</u>	d if the phase	order for Circ	cuit 1 is the ex	xact reverse	of the orde	er of C	ircuit 2.
	⇒ Is the line / d	cable transpos	sed?						
						Please tick:	Yes	No	Don't Know
			e de la companya de La companya de la companya de l						

Phase II data:

File name:

Description of each field on a line of data:

	Regio	on	Case	No.	
Identifying Number					A/B

III To be completed by the REC: Line Load Data (cont.)

	<u>ta Decision</u>			
	nine whether load data are required please indicate, using the information on page, whether the following statements are true:	on marke	ed with a "-	⇒" or
is the ope	erating voltage less than 66 kV?			Γ
	Please :	tick: Yes	No	Do Kn
An under	ground cable which does not have separated phases? Please	tick; Yes	No	Do Kn
An overbe	ead line, which is <u>transposed</u> , and the horizontal distance is more than			Г
	ating <600 A); 80m (for 600-1200 A); 120m (for >1200 A) Please to	tick: Yes	No No	Do Kno
	ead line, phasing not transposed, and the horizontal distance is more than rating <600 A); 140m (for 600-1200 A); 200m (for >1200 A) Please to	ick: Yes	No	Do Kno
	e answered "Yes" to any of the above, line load data are not required for add data required?			
	Please to	ick: Yes	No	Do Kno
2.2%	es in question above to load data required (or line load data provide uit conditions unchanged since Phase I):	d for Ph	ase I and	***
*** If ye circi	von - mond and many car differ i flage if.			
circi	line/cable load data available for the time of the Phase II measurement? Please ti		No	Dor
Circ	line/cable load data available for the time of the Phase II measurement?		No	Doi
Circ	line/cable load data available for the time of the Phase II measurement? Please ti	ck: Yes	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	7.
Circ	line/cable load data available for the time of the Phase II measurement? Please to If yes to load data available: One file of data is needed, containing data for the time of the Phase	ck: Yes	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	7.
circi	line/cable load data available for the time of the Phase II measurement? Please to If yes to load data available: One file of data is needed, containing data for the time of the Phapossible, please supply it as follows:	ck: Yes	easuremer	

One file line per measurement interval, each line being identified by the date and time. If the load currents in the circuit(s) are available, then no other quantity is needed. If the current is *not* available, then MW is required, and, if possible, MVar and Voltage.

Line no. for first line of data: