



Substation Site Selection RAG Methodology

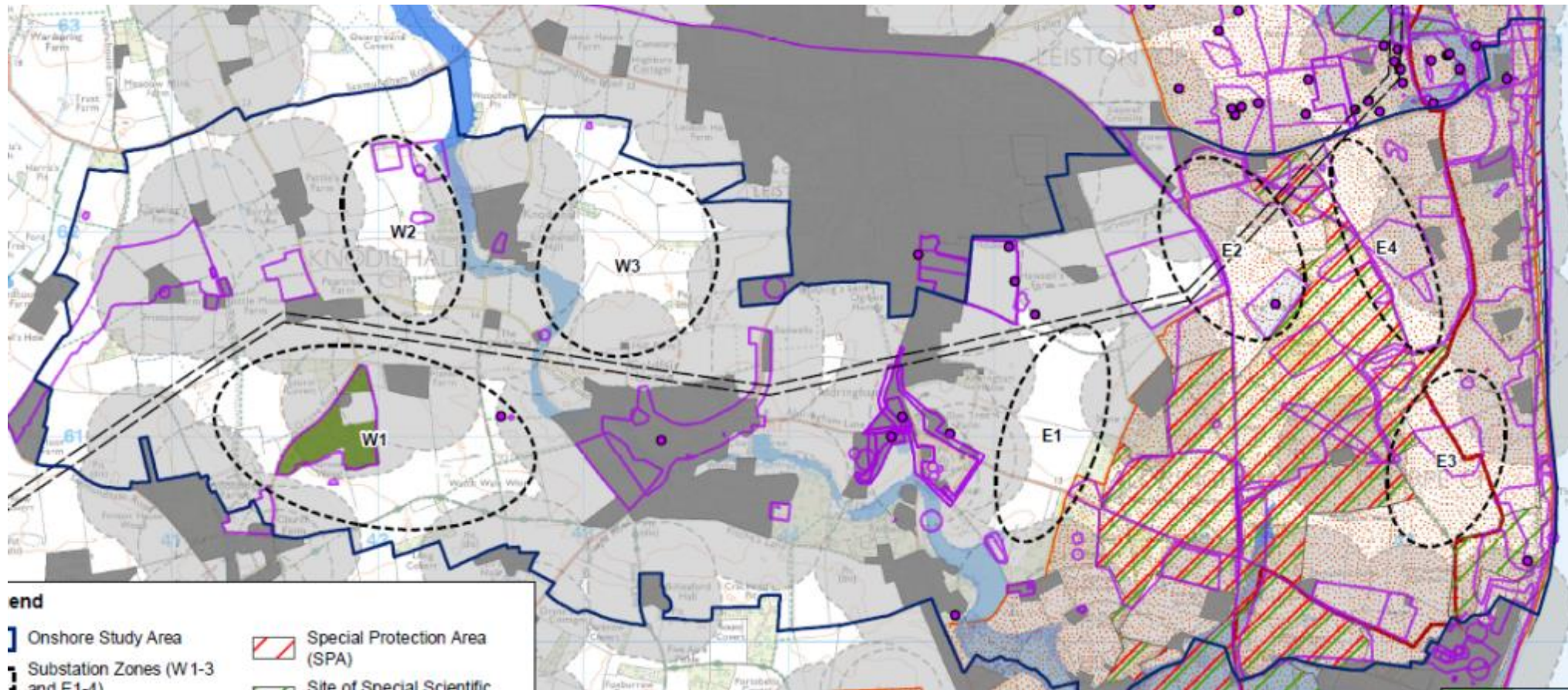
East Anglia ONE North and East Anglia TWO

May 2018

RAG Assessment Methodology

- Comparison between similar sites (optimal locations), assessed separately
 - 2 x ScottishPower Renewables (SPR) substations RAG
 - 1 x National Grid (NG) substation RAG
- Development considerations on **23** (SPR) and **22** (NG) parameters:
 - Community, property & planning
 - Landscape & visual
 - Engineering
 - Ecology
 - Archaeology
 - Hydrology / hydrogeology
- Ranking: defined parameters, professional judgement or relative to other options
- Red score does not eliminate an option

Substation Zones – RAG Constraints



RAG Assessment – Substation Results

Criteria	Option E1 (Fig3.3)	Option E1a (Fig3.3)	Option E2 (Fig3.4)	Option E2a (Fig3.4)	Option E3 (Fig3.5)	Option E3a (Fig3.5)	Option E4 (Fig3.6)	Option E4a (Fig3.6)	Option W1 (Fig3.7)	Option W1a (Fig3.7)	Option W2 (Fig3.8)	Option W2a (Fig3.8)	Option W3 (Fig3.9)	Option W3a (Fig3.9)8
Archaeology														
Proximity to National Designations – SMS, Grade 1 Listed Buildings	<500m but screened by woodland	<500m but screened by woodland							<500m but screened by woodland	<500m of Listed Building	<500m but screened by woodland	<500m but screened by woodland	<500m but screened by woodland	<500m but screened by woodland
Proximity to Regional Designations – Local Historic Environment Records, grade II Listed Buildings	<500m but screened by woodland	<500m but screened by woodland	<500m of HER monument	<500m of HER monument		<500m of HER monument		<500m but screened by woodland	<500m but screened by woodland	<500m of HER record	<500m of HER record	<500m of HER record	<500m of HER monument	<500m of HER monument
Ecology														
Proximity to National Designations – SSSI / SPA	<500m to SPA / SSSI	<500m to SPA / SSSI			<500m to SPA / SSSI	<500m to SPA / SSSI	<500m to SPA / SSSI	<500m to SPA / SSSI						
Proximity to Local Designations – Local Nature Reserves (LNR) / Suffolk County Wildlife Site														
Proximity to mature woodland	<500m to mature woodland	<500m to mature woodland	<500m to mature woodland	<500m to mature woodland	<500m to mature woodland	<500m to mature woodland	<500m to mature woodland	<500m to mature woodland	Cable route requires removal of mature woodland	Cable route requires removal of mature woodland	Cable route requires removal of mature woodland	Cable route requires removal of mature woodland	Cable route requires removal of mature woodland	Cable route requires removal of mature woodland
Landscape – see Appendix C Table C.1 for explanation of RAG scoring														
Potential to affect the special qualities of the AONB														
Proximity to Special Landscape Areas (SLA)														
Landscape character and sensitivity to development														
Opportunity to utilise existing features for screening														
Visual sensitivity to development														
Hydrology / hydrogeology														
Proximity to licenced abstraction points				<50m to abstraction										
Presence of potentially contaminated land														
Source Protection Zone									Within SPZ2	Within SPZ2	Within SPZ2	Within SPZ2	Within SPZ2	Within SPZ2
Proximity to fluvial flood risk		<500m to FZ3									<500m to FZ3	<500m to FZ3	<500m to FZ3	<50m to FZ3
Engineering														
Site efficiency					Limited co-location potential	Limited co-location potential							Limited co-location potential	Limited co-location potential

RAG Assessment – Substation Results

Criteria	Option E1 (Fig3.3)	Option E1a (Fig3.3)	Option E2 (Fig3.4)	Option E2a (Fig3.4)	Option E3 (Fig3.5)	Option E3a (Fig3.5)	Option E4 (Fig3.6)	Option E4a (Fig3.6)	Option W1 (Fig3.7)	Option W1a (Fig3.7)	Option W2 (Fig3.8)	Option W2a (Fig3.8)	Option W3 (Fig3.9)	Option W3a (Fig3.9)8
Highway access (construction and operational)	Access via Aldringham	Access via Aldringham	Access via Aldringham	Access via Aldringham	Access via Aldringham	Access via Aldringham	Access via Sizewell Gap Road	Access via Sizewell Gap Road						
Proximity to high voltage electrical transmission infrastructure (overhead lines)	>500m to OHL				>1km to OHL	>1km to OHL	>500m to OHL				>500m to OHL		>500m to OHL	
Community														
Presence of residential properties	Properties <250m but screened by woodland		Properties within 50m	Properties within 50m	Properties <250m but screened by woodland		Properties within 250m	Properties within 50m	Properties <250m but screened by woodland			Properties <250m but screened by woodland		Properties within 250m
PRoW / National trails (NT)			Public bridleway <100m	Public bridleway <100m	Public footpath <100m			Public bridleway <100m		Crosses public footpath	Public footpath <100m	Public footpath <100m		
Agricultural Land Classification	ALC Zone 2 or 3	ALC Zone 2 or 3	ALC Zone 2 or 3	ALC Zone 2 or 3	ALC Zone 2 or 3		ALC Zone 2 or 3	ALC Zone 2 or 3	ALC Zone 2 or 3	ALC Zone 2 or 3	ALC Zone 2 or 3	ALC Zone 2 or 3	ALC Zone 2 or 3	ALC Zone 2 or 3
Sensitive land uses (schools and hospitals)				School <250m										
Property														
Number of landowners														
Planning														
Current planning applications or knowledge of other developments														
SCORE	1 red 9 yellow 13 green	1 red 9 yellow 13 green	1 red 10 yellow 12 green	2 red 11 yellow 10 green	4 red 6 yellow 13 green	4 red 6 yellow 13 green	4 red 5 yellow 14 green	5 red 5 yellow 13 green	1 red 2 yellow 20 green	1 red 5 yellow 17 green	1 red 8 yellow 14 green	1 red 7 yellow 15 green	1 red 8 yellow 14 green	2 red 8 yellow 13 green

RAG Assessment – Substation Results

