

SHADOW FLICKER EFFECT

DECC CONSULTATION QUESTIONNAIRE

All information provided in this questionnaire will be treated as strictly confidential and will not be passed to any third parties. Analysis based on the information provided will be referred to in generic trends, and no site-specific or company-specific details will be published.

The closing date for questionnaire submissions is: WEDNESDAY 15th DECEMBER 2010

Please complete any sections of this questionnaire that are relevant to your area of expertise or experience.

Q1: Has your company / organisation been involved in preparing any aspect of a shadow flicker assessment for a proposed onshore wind energy development in the UK?



Q2: Has your company / organisation presented evidence relating to shadow flicker effect at a Public Local Inquiry?



Q3: Is your company / organisation involved with 'Operation and Maintenance' of an operational onshore wind farm / wind turbine?



Q4: Is your company / organisation involved in any other way with investigation of shadow flicker effects relating to onshore wind energy developments?







CONTACT DETAILS

Name	
Organisation Name	
Position / Job Title	
Email Address	
Telephone Number	
Postal Address	





GENERAL ASSESSMENT CRITERIA

'10 x Rotor Diameter' rule-of-thumb

Companion Guide to PPS22 states:

"Shadow flicker can be mitigated by siting wind turbines at sufficient distance from residences likely to be affected. Flicker effects have been proven to occur only within ten rotor diameters of a turbine. Therefore if the turbine has 80m diameter blades, the potential shadow flicker effect could be felt up to 800m from a turbine."

Q5: When assessing shadow flicker impact, do you:

Please se	lect
Other	

Q6: Do you assess shadow flicker effects:

	Please sel	ect
Othe	r	

Q7: Do you assess shadow flicker effects on:

Please tick	 Road users? Footpath users? Bridleway users? Non-residential properties (eg. offices, warehouses, etc)? Other receptors? - <i>please specify in 'Other'</i>

Other	

- Q8: When preparing a planning application, what mitigation strategies for predicted shadow flicker effects do you propose?
 - Please tick
 Careful site design to minimise / eliminate impact

 Turbine shut-down strategy
 Installation of blinds

 Landscaping / vegetation screening
 Other please specify in 'Other'box

Other	





COMPUTER MODELS

Q9: What software package(s) do you use to assess shadow flicker?

Please specify	

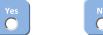
Q10: Do you find this software satisfactory for preparing a shadow flicker assessment that is of an appropriate standard to support a planning application?



Q11: If 'No', please elaborate below:

	Please elaborate	
--	------------------	--

Q12: When preparing shadow flicker assessments, do you input field data or site-specific environmental data into your model?



Q13: If 'Yes', please elaborate below:

Please elaborate	
------------------	--

'Worst Case Scenario'

The 'Worst Case Scenario' assumes:

- Continuous sunshine during daylight hours;
- Continually rotating turbine blades;
- No vegetation or other obstacles are screening the receptor;
- The wind turbine rotor plane is always perpendicular to the receptor and sun.

Q14: Do your shadow flicker assessments adhere to the 'Worst Case Scenario' detailed above?



Q15: If 'No', please specify how they differ and your reason for adopting an alternative approach.

Please specify	





OPERATIONAL EXPERIENCE

Q16: Does your company own or manage any operational wind energy developments?



Q17: If 'Yes', please specify your company's role.

Please se	elect
Other	

PLEASE NOTE As with all information provided in this questionnaire, data collected in the following section will be treated as strictly confidential. Analysis based on the information provided will be referred to in generic trends, and no site-specific or company-specific details will be published.

Q18: Have you received (or are you aware of) any complaints raised in relation to shadow flicker effect at any of your operational wind energy developments?



Q19: If 'Yes', please provide: details of the project(s) including the wind farm in question; details of the complaint(s) including document references; the circumstances triggering the complaint; and details of how the complaint was resolved.

Please comment	
Please comment	

Q20: What mitigation strategies for shadow flicker effects have been implemented on your operational wind energy developments?

 Please tick
 Careful site design to minimise / eliminate impact

 Turbine shut-down strategy

 Installation of blinds

 Landscaping / vegetation screening

 Other - please specify in 'Other' box

Other		

Q21: How successful have these mitigation strategies been in practice? Please provide as much detail as possible in the text box below.

Please comment	

Q22: Have you observed shadow flicker effect occurring outside buildings, or in other circumstances different from those set out in current guidance (which states "shadow flicker only occurs inside buildings where the flicker appears through a narrow window opening)?



Q23: If 'Yes', please elaborate below.

Please elaborate	





CURRENT GUIDANCE

Link to: 'Companion Guide to Planning Policy Statement 22 (PPS22)' shadow flicker text

'10 x Rotor Diameter' rule-of-thumb

Companion Guide to PPS22 states:

"Shadow flicker can be mitigated by siting wind turbines at sufficient distance from residences likely to be affected. Flicker effects have been proven to occur only within ten rotor diameters of a turbine. Therefore if the turbine has 80m diameter blades, the potential shadow flicker effect could be felt up to 800m from a turbine."

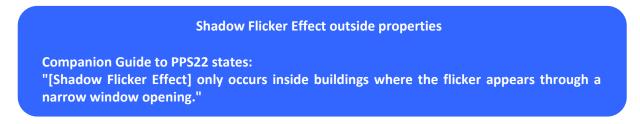
Q24: Do you consider the '10 x Rotor Diameter' rule an appropriate assessment area for shadow flicker reports?



Q25: Would an alternative calculation method for the assessment area be preferable to the '10 x Rotor Diameter' rule?

Please select

Other	



Q26: Should shadow flicker assessments be limited to the interior of residential buildings?



flicker assessments.

Pleas

Other

Q27: If 'No', should the following receptors be included in shadow flicker assessments?

se tick	 Road users Footpath users Bridleway users Non-residential properties (eg. offices, warehouses, etc)
	 Non-residential properties (eg. offices, warehouses, etc) Other receptors - <i>please specify in 'Other'box</i>

000						c				•	
Q28:	Please	elaborate	on	your	reason(s)	tor	including	additional	receptors	ın	shadow

Please e	laborate
----------	----------

Quantitative Guidance

In recent years, regulations have emerged in other countries proposing a quantitative approach to assessing shadow flicker. This approach sets a limit on the duration that a receptor can be exposed to shadow flicker effect.

Q29: What is your opinion on the value of adopting quantitative guidance on shadow flicker effect?

Please comment	

Q30: Please include any other comments you have relating to amendments / omissions / additions to current UK guidance.

Please comment	





THANK YOU

Thank you for completing this form. Your assistance is greatly appreciated.

If you have any additional comments, please include them in the text box below.

Please comment	
r lease comment	

Q31: Would you be happy for a representative to contact you to discuss elements of this questionnaire further?



Q32: What is your preferred method of contact?







SUBMIT FORM

Option 1 - Please submit form by pressing the following button:

SUBMIT

(A blank Outlook message will open automatically)

Option 2 - If 'Submit' button above does not work, please click 'Save As', attach the saved PDF document to an email, and send to DECC@pbworld.com

Option 3 - If 'Save As' method fails, please click 'Print to PDF', attach the saved PDF document to an email, and send to DECC@pbworld.com

Option 4 -If the above options fail, please email us at problem and we will resolve the issue as soon as possible.

End of form.

