



## The Progress Power (Gas Fired Power Station) Order

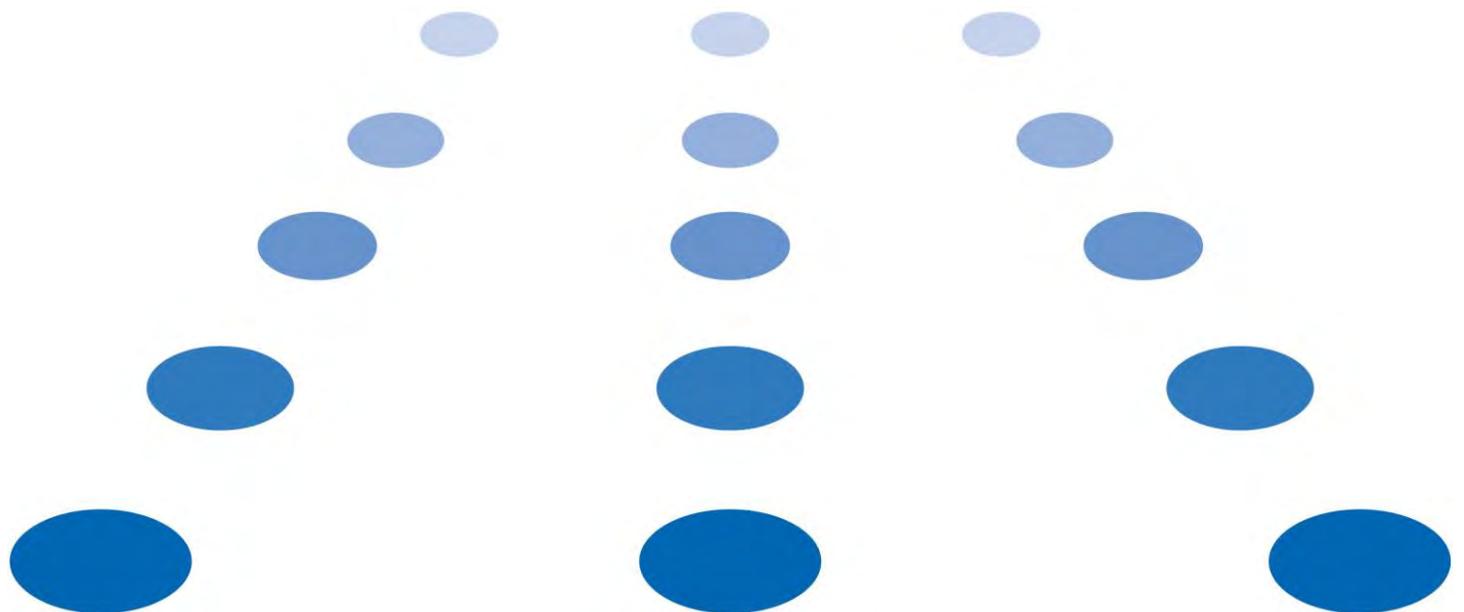
### Outline Lighting Strategy

#### Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

**PINS Reference Number:** EN010060  
**Regulation Number:** 5(2)(o)  
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Revision	Date	Description
0	December 2014	Examination version (Deadline 6: in response to discussions between the parties)



## 1. Progress Power Lighting Design Principles

- 1.1 Lighting objectives to minimise the adverse effect of artificial lighting during construction are set out in the Outline CEMP. Details of lighting during construction will be set out in the final CEMP to be submitted for the approval of the local planning authority under DCO Requirement 11 (k) (Construction Environment Management Plan).
- 1.2 Details of permanent lighting will be submitted for the approval of the local planning authority under DCO Requirement 18 (Control of artificial light emissions during operational phase). Lighting will be designed to limit obtrusive light to sensitive receptors surrounding the Project Site whilst considering national, regional and local planning policies. Sensitive receptors include residents of nearby settlements, in particular Yaxley and Eye, and key ecological corridors.
- 1.3 External lighting will be required at the Power Generation Plant for internal roads, pedestrian walkways, car parks, security and for buildings to meet operational requirements. It will be pole mounted, generally 6m high. Internal lighting will be required within buildings for occupational and operational requirements.
- 1.4 The need for external lighting within the Above Ground Installation and Electrical Connection Compounds will be infrequent. Infra-red floodlighting and CCTV systems will be used for security purposes. Lighting will however be required within buildings, though appropriate measures to reduce light spill will be included. External lighting will only be required for routine and unplanned maintenance activity
- 1.5 Lighting within the Electrical Connection Compound will be pole mounted, and will be generally 6m high within the Substation Compound and 4m high within the Sealing End Compound. Pole mounted lighting of a similar height will be provided within the Above Ground Installation.
- 1.6 The general design principles that will be used to minimise the impact on key lighting receptors and to meet environmental requirements are:
  - To design for optimal light levels which provide enough illumination to safely undertake operational activities while limiting their impact on sensitive receptors;
  - To locate significant sources of lighting away from sensitive landscape and ecological receptors;

- To include full horizontal cut-off luminaires to prevent upward light with shields and baffles that can be directed downwards rather than horizontally to limit light pollution onto sensitive areas;
- To use columns of a minimum height. When lighting large areas preference would be given to several lower units rather than tall wide beam lighting units to limit light trespass, glare and sky glow;
- To use controls to avoid unnecessary illumination and to ensure efficient luminaires are used;
- To use automated devices to switch lights on and off according to activity and ambient levels and
- To direct light to the area where it is needed to avoid reflectance from buildings and structures and to avoid illuminating building facades.

1.7 The written scheme for the management and mitigation of artificial light emissions to be submitted under DCO Requirement 18 will take into consideration the receptors and general design principles described above. The Lighting Scheme will contain:

- Details of the timing of the lighting requirements.
- A polar luminance diagram based on the vertical luminance at the height of the windows (on the facing façade) of the nearest sensitive residential properties or a 0-lux contour line (showing the surrounding area up to this contour line).
- A diagram to demonstrate that lighting proposals reasonably minimise the adverse landscape and ecological impacts of the proposed lighting scheme

1.8 The Lighting Scheme will have regard to the following guidance:

- The Institution of lighting engineers (now the Institute of Lighting Professionals) document 'Guidance notes for the Reduction of Obtrusive Light' particularly the objective to keep glare to a minimum by ensuring that the main beam of all lights directed towards any potential observer is not more than 70°. This is available to download from <https://www.theilp.org.uk/documents/obtrusive-light/>.