

REGULATORY OBSERVATION	
REGULATOR TO COMPLETE	
RO unique no.:	RO-ABWR-0060
Date sent:	08 th July 2015
Acknowledgement required by:	29th July 2015
Agreement of Resolution Plan Required by:	31 st July 2015
Resolution of Regulatory Observation required by:	<i>To be determined by the Hitachi-GE Resolution Plan</i>
TRIM Ref.:	2015/254805
Related RQ / RO No. and TRIM Ref. (if any):	
Observation title:	Environmental impact of emissions to air from diesel generators
Technical area(s) 21. GEP	Related technical area(s) 7. Electrical Power Supply
<i>Regulatory Observation</i>	
Summary	
<p>This RO requires Hitachi-GE to carry out further work to demonstrate that the environmental impact of the emissions to air from the Emergency Diesel Generators (EDGs) and Back-up Building Diesel Generators (B/B DGs) are at an acceptable level.</p>	
Background	
<p>Hitachi-GE has provided some initial high level screening information on the combustion plant installation included in the UK ABWR design in support of the submission for "Other Environmental Regulations".</p> <p>The UKABWR combustion installation consists of 3 emergency diesel generators (EDGs), 2 back-up building diesel generators (B/B DGs) and 2 auxiliary boilers. The initial impact assessment follows the screening methodology in the Environment Agency H1 Guidance.</p> <p>The H1 screening methodology indicates the maximum calculated short term ground level concentration of nitrogen dioxide (NO₂) from the operation of a single EDG could be as high as approximately 35,000 µg/m³. The short term environmental assessment level (EAL) for NO₂ is 200 µg/m³; this means the maximum short term NO₂ concentration from a single EDG is significantly greater than the EAL.</p> <p>The calculated maximum short term NO₂ ground level concentration from the operation of a single B/B DG is approx 15,600 µg/m³, which is also significantly greater than the EAL.</p> <p>At these levels the short term environmental impact of the NO₂ emissions from both the EDG and B/B DGs is unacceptable. Further work is required to demonstrate that the environmental impact from emissions to air from combustion plant will be at an acceptable level.</p>	
<i>Regulatory Observation Actions</i>	
RO-ABWR-0060.A1:	
<p>Carry out further work to demonstrate that the environmental impact of emissions to air from EDGs and B/B DGs are at an acceptable level.</p>	

NOT PROTECTIVELY MARKED

Resolution required by: To be determined by the Hitachi-GE Resolution Plan

REQUESTING PARTY TO COMPLETE

Actual Acknowledgement date:

RP stated Resolution Plan agreement date: