

25th July 2025

Ref: 16087-005 R0

Evie Kneler
Clean Earth Energy
Unit 2A
Bess Park Road
Wadebridge
PL27 6HB

Dear Evie,

BEARS DOWN WIND FARM RE-POWERING – CHANGE FROM 5 TURBINE LAYOUT TO 4 TURBINE LAYOUT BY REMOVING T1

Clean Earth Energy (CEE) has appointed TNEI Services Limited (TNEI) to prepare a noise statement in response to a potential layout change at Bears Down Wind Farm. The planning application and noise report from TNEI was submitted for five turbines and CEE is considering removing T1, which would result in a layout reduced to four turbines hence to a lesser noise impact at receptors nearest to T1.

The repowering of Bears Down Wind Farm is currently under consideration by Cornwall Council. The revised proposal remains within the existing site boundary and aims to optimise turbine performance while reducing potential landscape and environmental impacts. This reduction in turbine numbers reflects ongoing design refinements informed by consultation and technical assessments undertaken as part of the planning process.

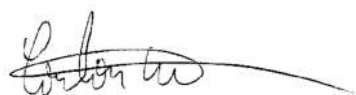
A lesser noise impact would result from this reduction in turbine numbers and to quantify this change in layout, noise predictions have been updated to compare the 5 x turbines layout (as predicted in TNEI report 16087-003 December 2023) with the 4 x turbines layout (T1 removed). The comparison is provided in detail for all receptors (i.e. residential properties) in the Figure A1.3a-I found in Annex 1 appended to this letter. The results indicate a decrease in predicted noise levels across the site. The most notable reductions occur as expected at receptors to the east (NAL1 and NAL2) where predicted levels have decreased by approximately 4dB.

The revised four-turbine layout results in lower predicted noise levels, offering an overall improvement in acoustic impact—particularly for receptors to the east of the site. It should be noted that this change of layout does not affect the Site Specific Noise Limits established previously. A key conclusion from the December 2023 report was *“The final choice of turbine would, however, have to meet Site Specific Noise limits which should form the basis of any noise conditions.”* and this conclusion remains valid.

Newcastle
7th Floor, West One
Forth Banks
Newcastle Upon Tyne
NE1 3PA

Tel: +44(0)191 211 1400
Email: info@tneigroup.com
Website: www.tneigroup.com

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Coulon', with a long horizontal flourish extending to the right.

Moise Coulon

Dip, MIOA

Principal Consultant

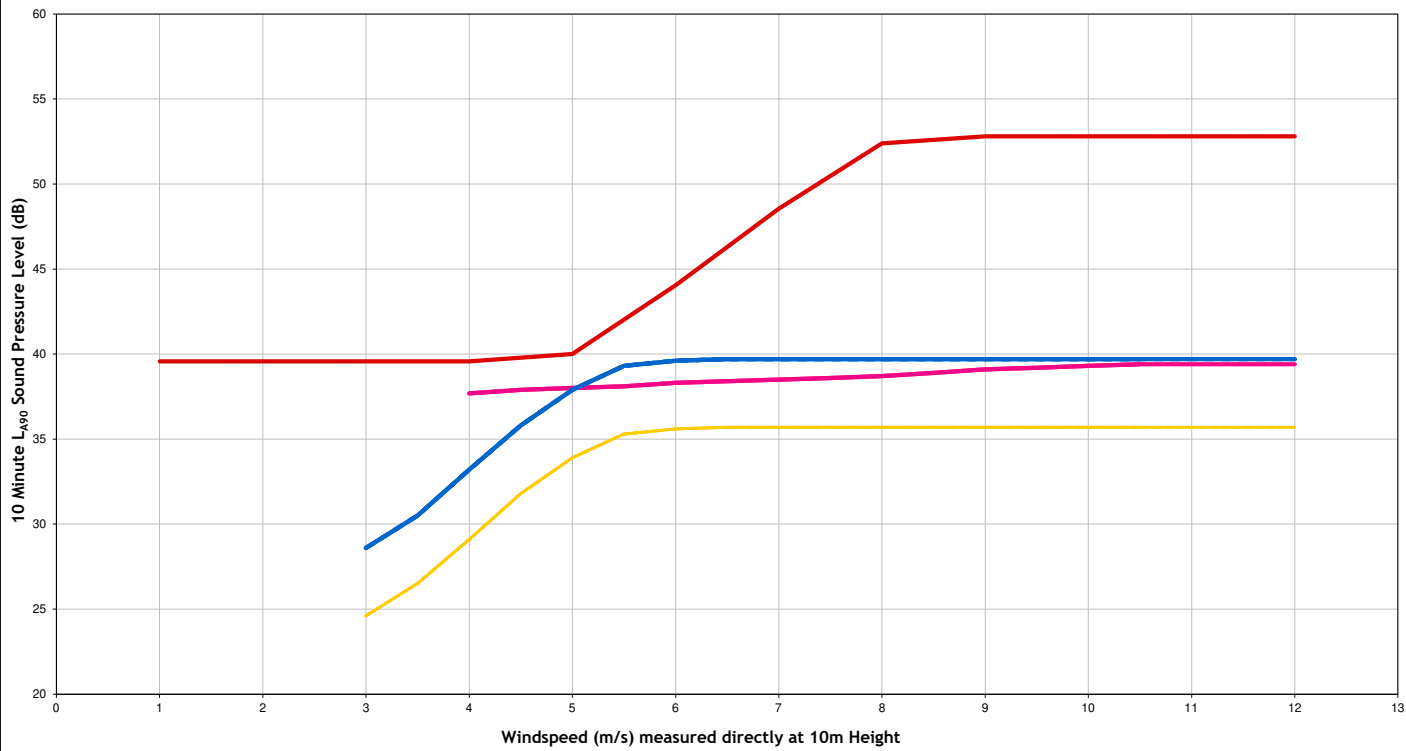
moise.coulon@tneigroup.com

Tel: 0191 211 1408

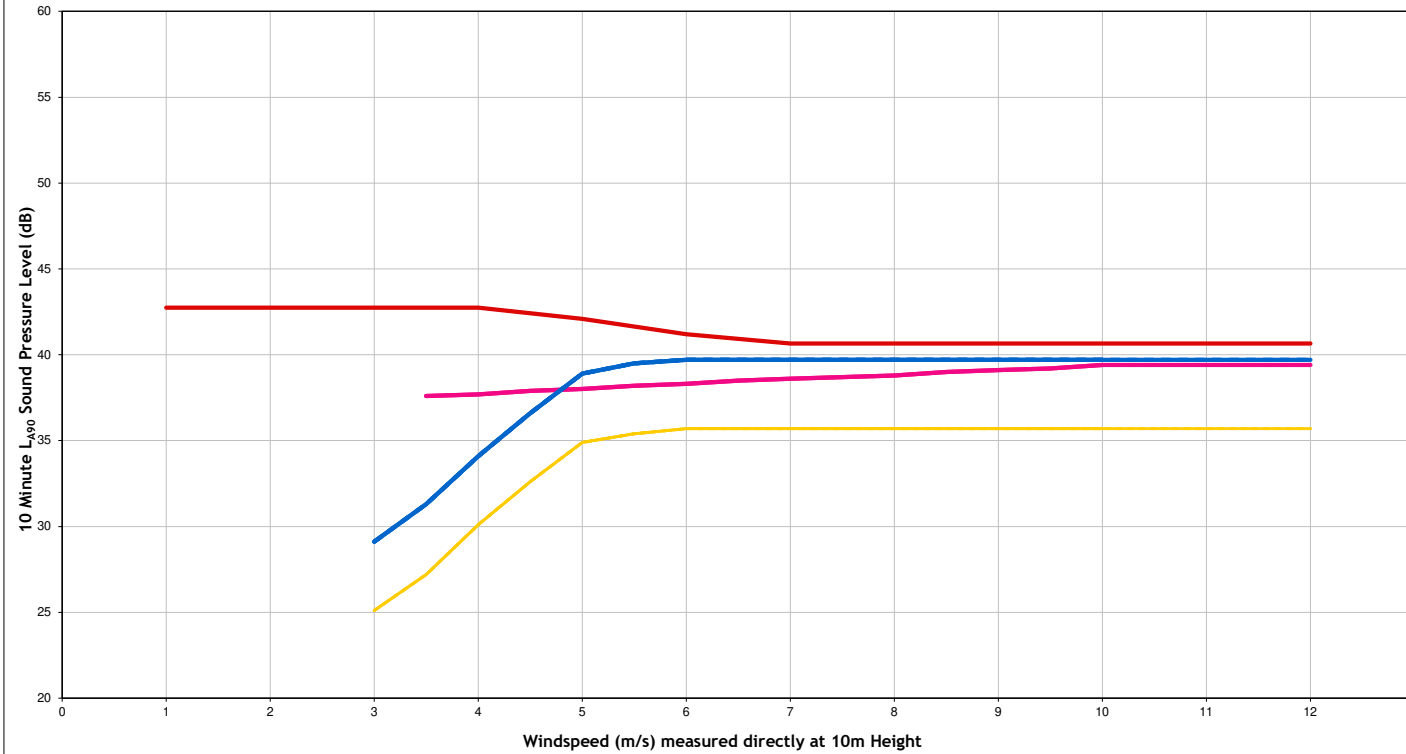
Enc: Annex 1 – Noise prediction figures showing with and without T1

Annex 1 – Noise prediction figures showing with and without T1

Daytime - Caravans adjacent to Trevilledor (NAL1)



Night Time - Caravans adjacent to Trevilledor (NAL1)



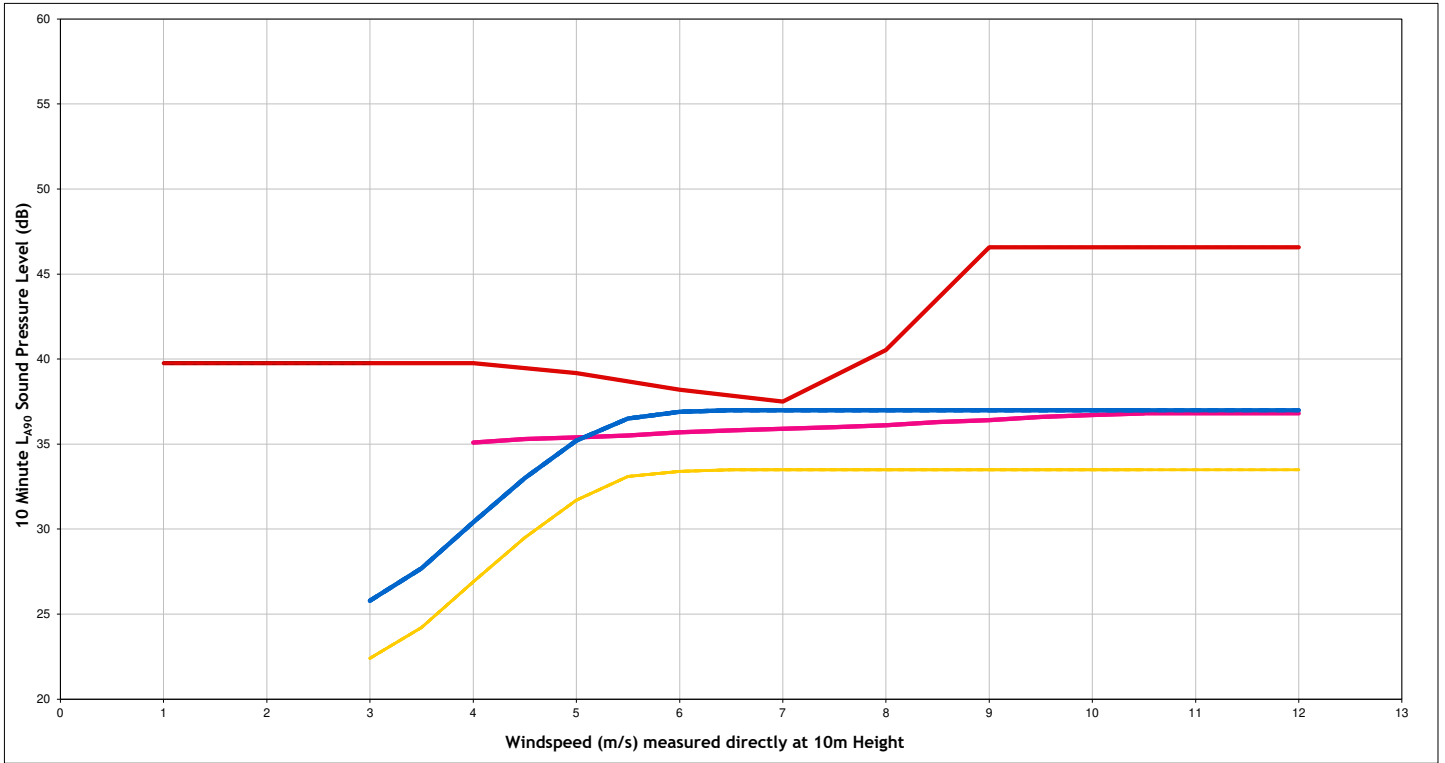
Legend:

- Site Specific Noise Limit for Bears Down Wind Farm Repowering
- Existing Bears Down (16 x Bonus 600kW) [30°]
- Proposed Bears Down Repowering (5 x V136 4.5MW PO4 full mode) [30°]
- Unused(no mitigation required)
- Proposed Bears Down Repowering without T1(4 x V136 4.5MW PO4 full mode) [30°]
- Unused(no mitigation required)

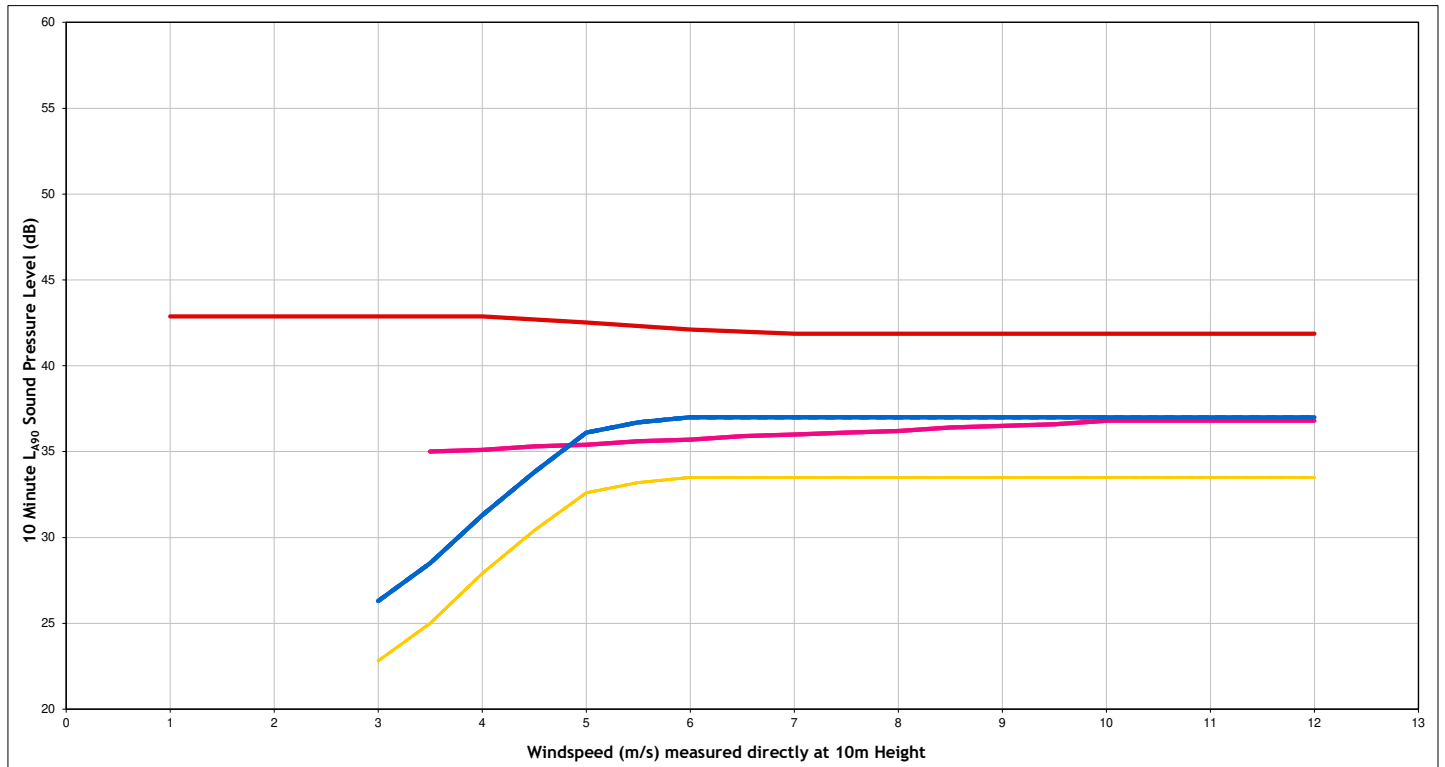
Project	Bears Down Wind Farm Repowering
Client	Clean Earth Energy
Title	Noise Assessment - Site Specific Noise Limit NAL1
Figure Number	Figure A1.3a
Scale	NTS
Drawn	EH
Checked	MC
Date	18/07/2025
Document Reference	16087-ETSU Model



Daytime - Trevilledor (NAL2)



Night Time - Trevilledor (NAL2)



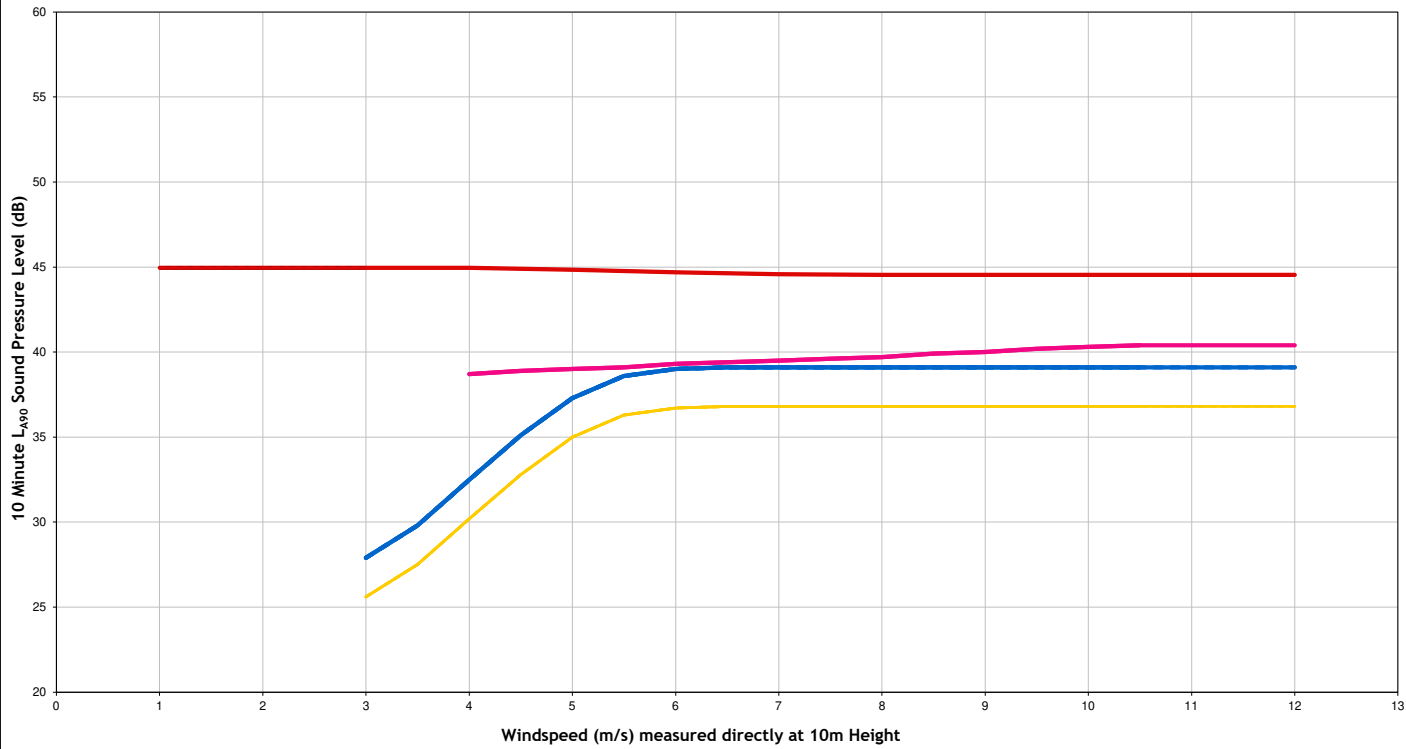
Legend:

- Site Specific Noise Limit for Bears Down Wind Farm Repowering
- Existing Bears Down (16 x Bonus 600kW) [30°]
- Proposed Bears Down Repowering (5 x V136 4.5MW PO4 full mode) [30°]
- Unused(no mitigation required)
- Proposed Bears Down Repowering without T1(4 x V136 4.5MW PO4 full mode) [30°]
- Unused(no mitigation required)

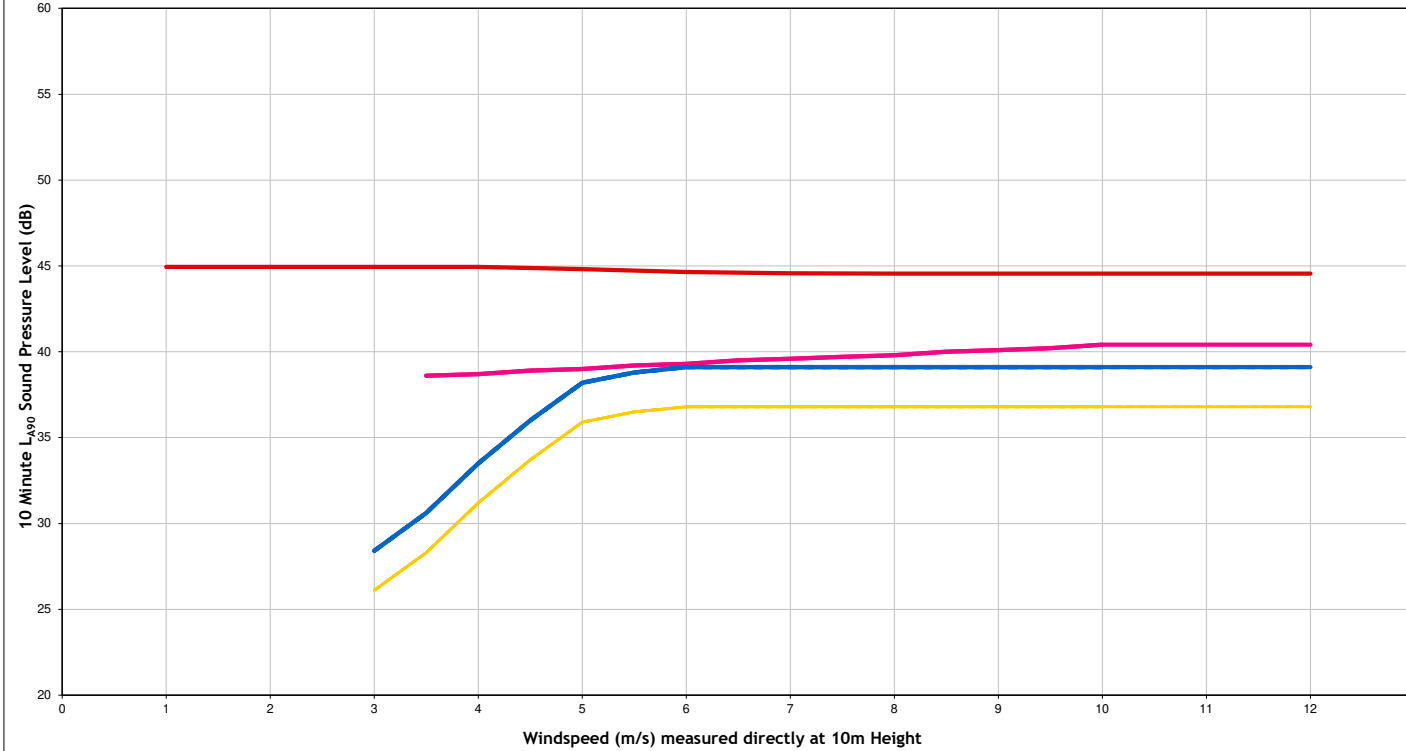
Project	Bears Down Wind Farm Repowering
Client	Clean Earth Energy
Title	Noise Assessment - Site Specific Noise Limit NAL2
Figure Number	Figure A1.3b
Scale	NTS
Drawn	EH
Checked	MC
Date	18/07/2025
Document Reference	16087-ETSU Model



Daytime - Eddystone (FI with Bears Down Repowering) (NAL3)



Night Time - Eddystone (FI with Bears Down Repowering) (NAL3)



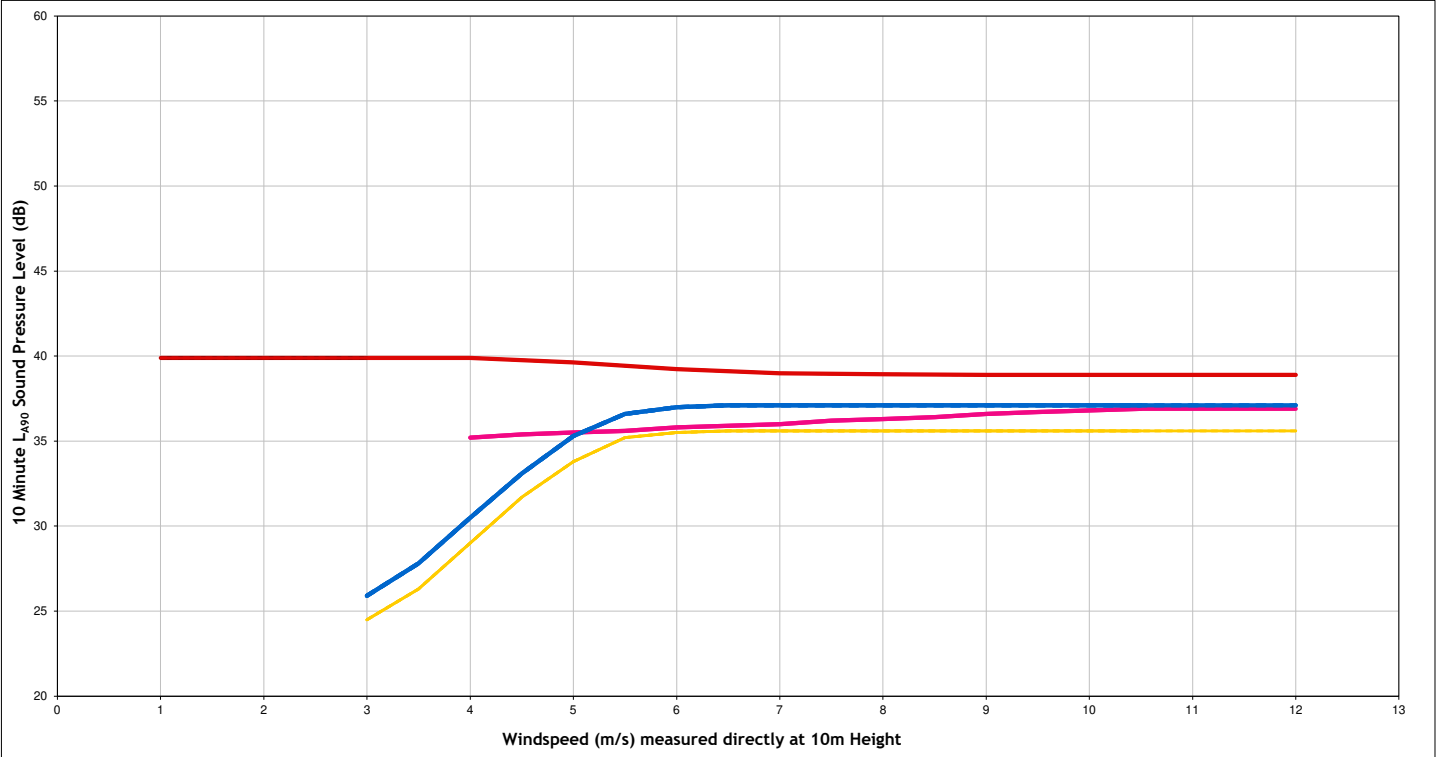
Legend:

- Site Specific Noise Limit for Bears Down Wind Farm Repowering
- Existing Bears Down (16 x Bonus 600kW) [150°]
- Proposed Bears Down Repowering (5 x V136 4.5MW PO4 full mode) [120°]
- Unused(no mitigation required)
- Proposed Bears Down Repowering without T1(4 x V136 4.5MW PO4 full mode) [120°]
- Unused(no mitigation required)

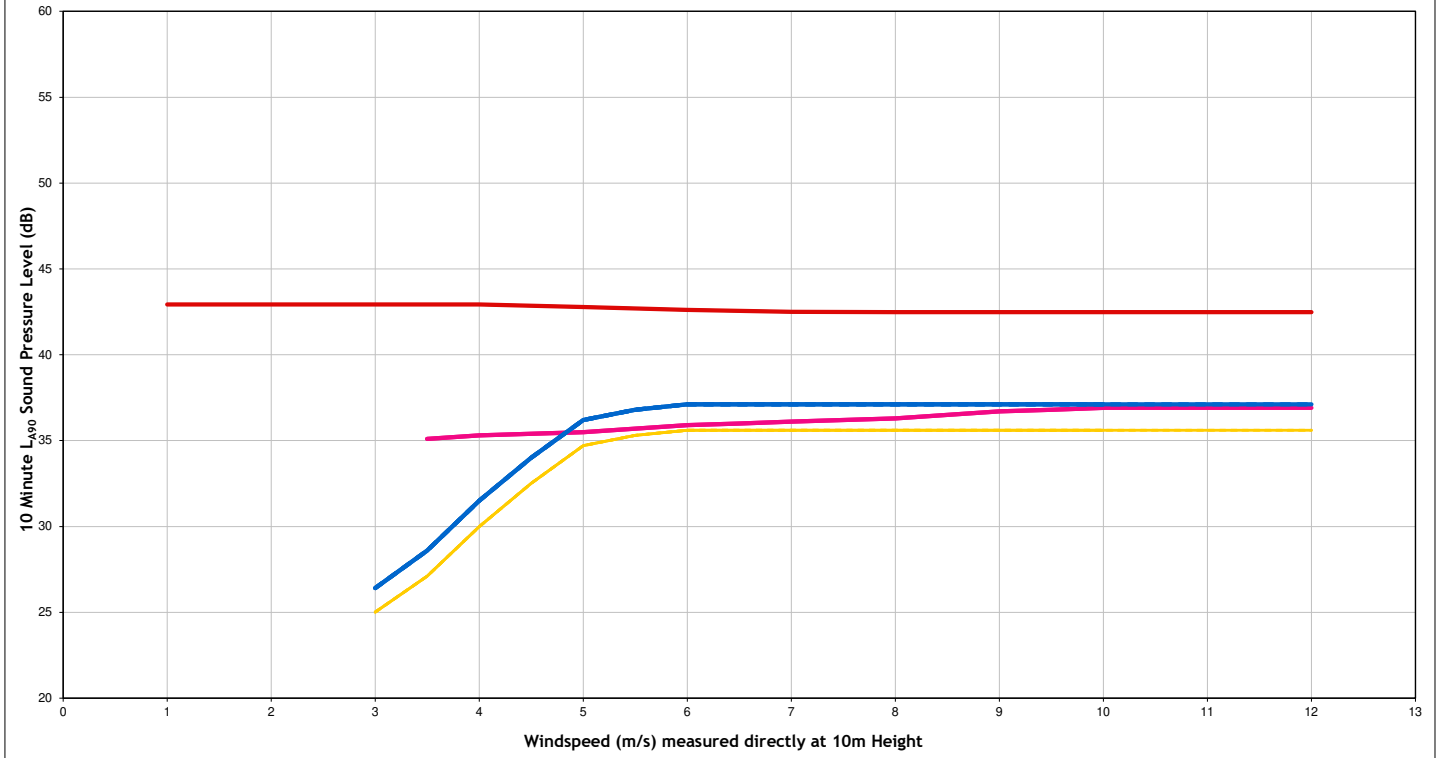
Project	Bears Down Wind Farm Repowering
Client	Clean Earth Energy
Title	Noise Assessment - Site Specific Noise Limit NAL3
Figure Number	Figure A1.3c
Scale	NTS
Drawn	EH
Checked	MC
Date	18/07/2025
Document Reference	16087-ETSU Model



Daytime - Tremount (NAL4)



Night Time - Tremount (NAL4)



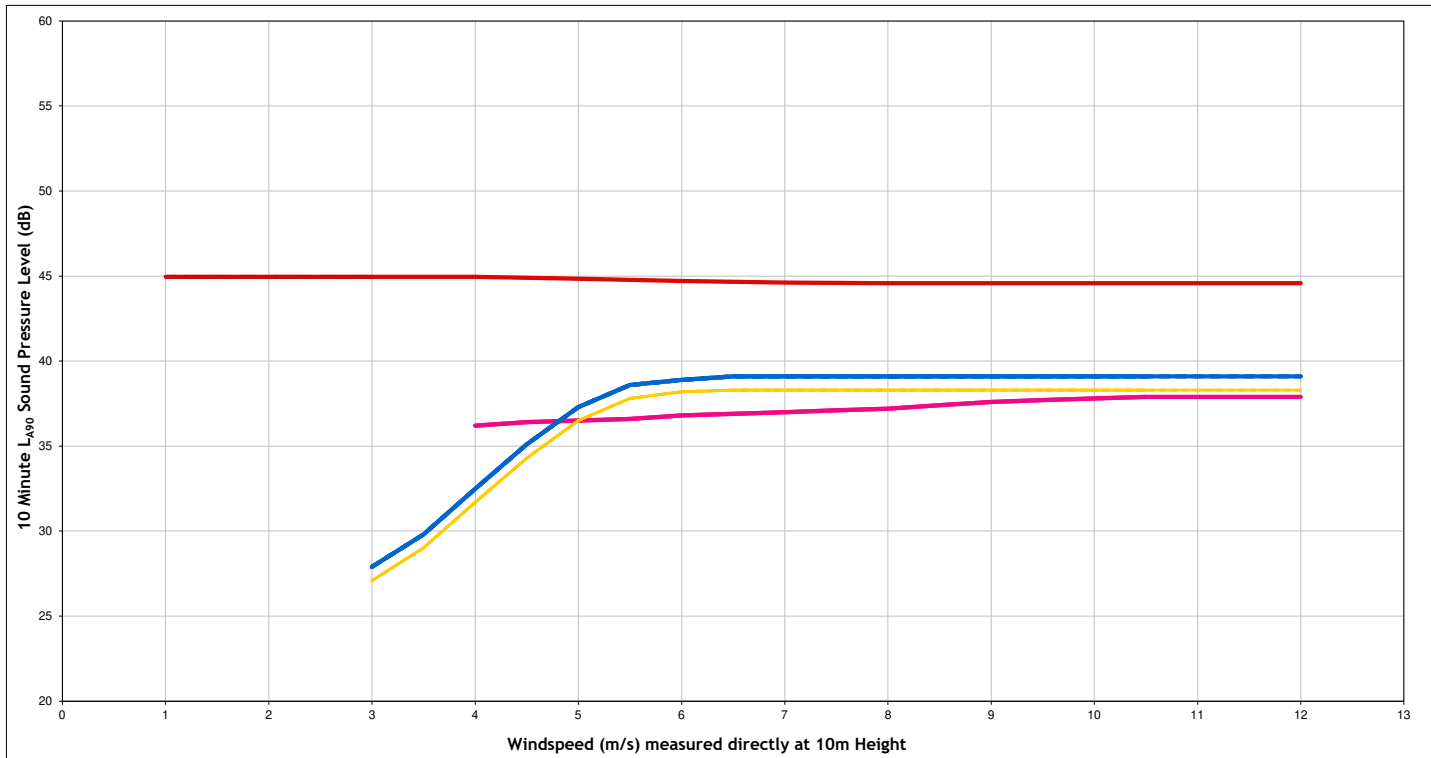
Legend:

- Site Specific Noise Limit for Bears Down Wind Farm Repowering
- Existing Bears Down (16 x Bonus 600kW) [150°]
- Proposed Bears Down Repowering (5 x V136 4.5MW PO4 full mode) [150°]
- Unused(no mitigation required)
- Proposed Bears Down Repowering without T1(4 x V136 4.5MW PO4 full mode) [150°]
- Unused(no mitigation required)

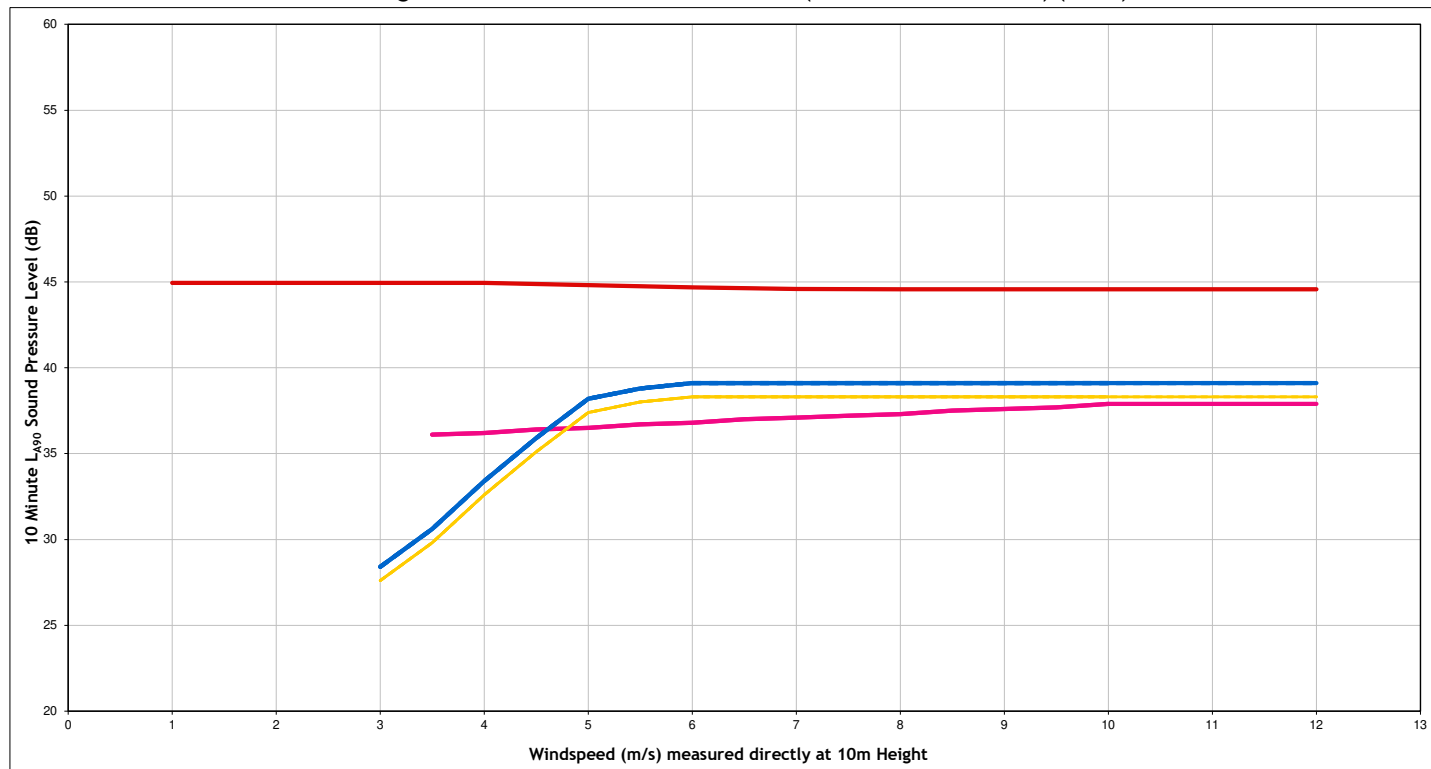
Project	Bears Down Wind Farm Repowering
Client	Clean Earth Energy
Title	Noise Assessment - Site Specific Noise Limit NAL4
Figure Number	Figure A1.3d
Scale	NTS
Drawn	EH
Checked	MC
Date	18/07/2025
Document Reference	16087-ETSU Model



Daytime - Caravan north of Trenwick (limit from Trenmount) (NAL5)



Night Time - Caravan north of Trenwick (limit from Trenmount) (NAL5)



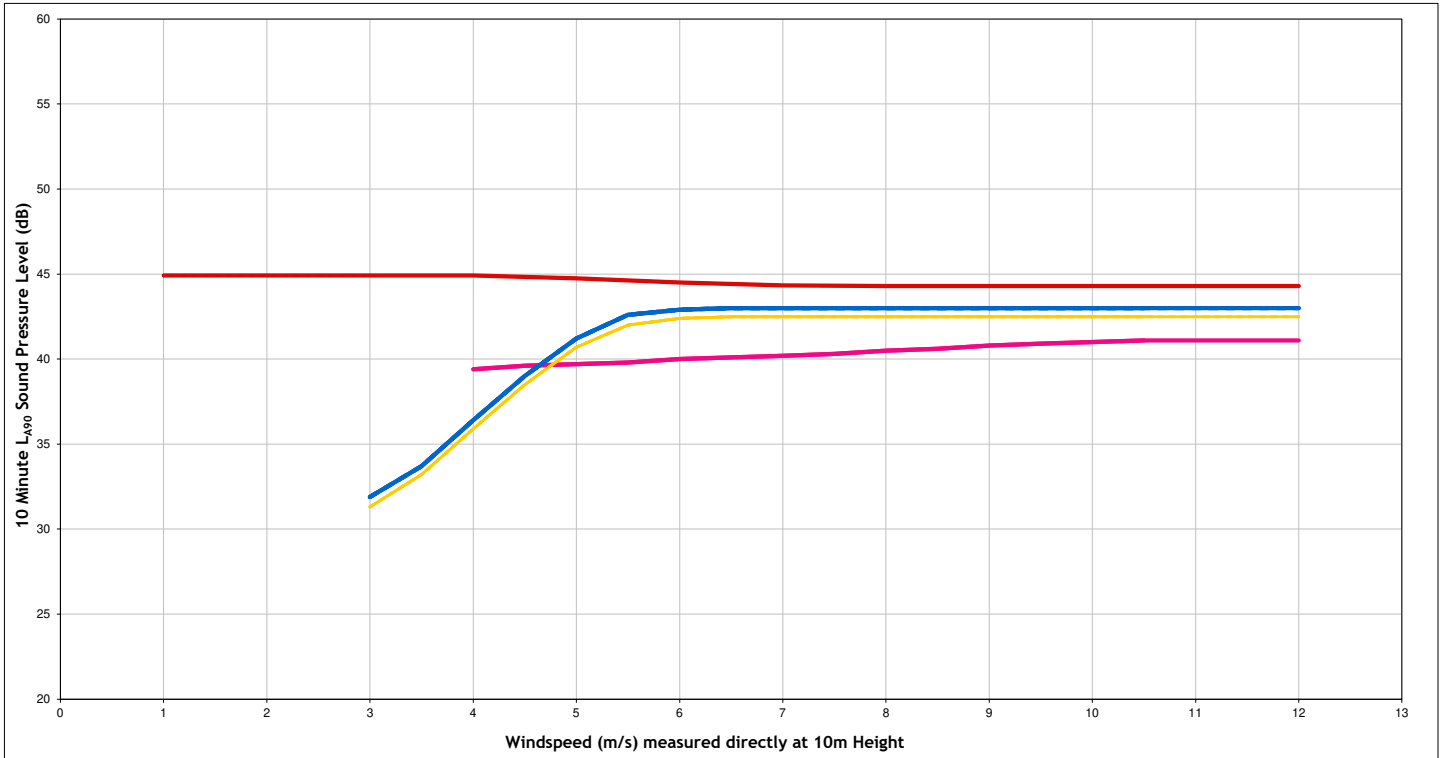
Legend:

- Site Specific Noise Limit for Bears Down Wind Farm Repowering
- Existing Bears Down (16 x Bonus 600kW) [180°]
- Proposed Bears Down Repowering (5 x V136 4.5MW PO4 full mode) [150°]
- Unused(no mitigation required)
- Proposed Bears Down Repowering without T1(4 x V136 4.5MW PO4 full mode) [150°]
- Unused(no mitigation required)

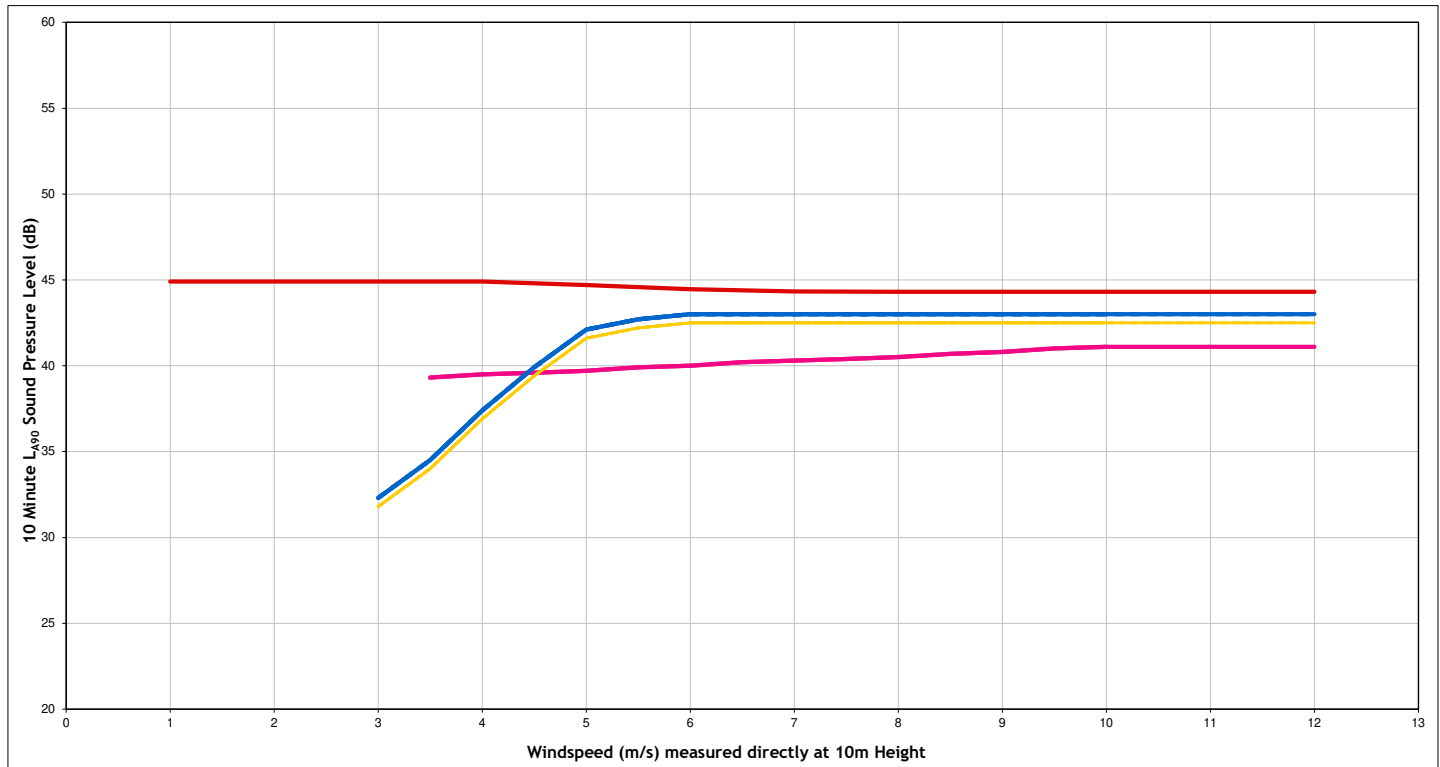
Project	Bears Down Wind Farm Repowering
Client	Clean Earth Energy
Title	Noise Assessment - Site Specific Noise Limit NAL5
Figure Number	Figure A1.3e
Scale	NTS
Drawn	EH
Checked	MC
Date	18/07/2025
Document Reference	16087-ETSU Model



Daytime - Little Trewinnick (FI with Bears Down Repowering) (NAL6)



Night Time - Little Trewinnick (FI with Bears Down Repowering) (NAL6)



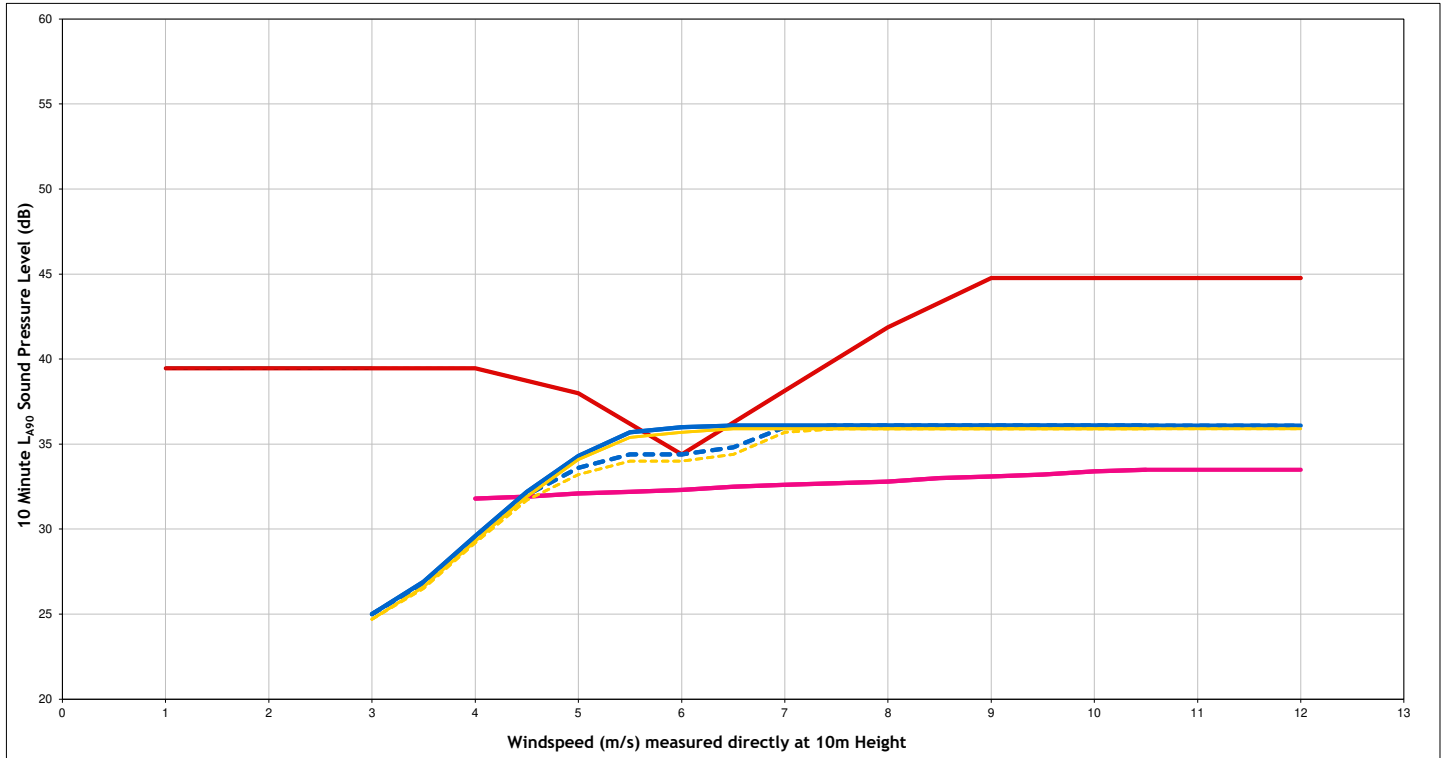
Legend:

- Site Specific Noise Limit for Bears Down Wind Farm Repowering
- Existing Bears Down (16 x Bonus 600kW) [210°]
- Proposed Bears Down Repowering (5 x V136 4.5MW PO4 full mode) [180°]
- Unused(no mitigation required)
- Proposed Bears Down Repowering without T1(4 x V136 4.5MW PO4 full mode) [180°]
- Unused(no mitigation required)

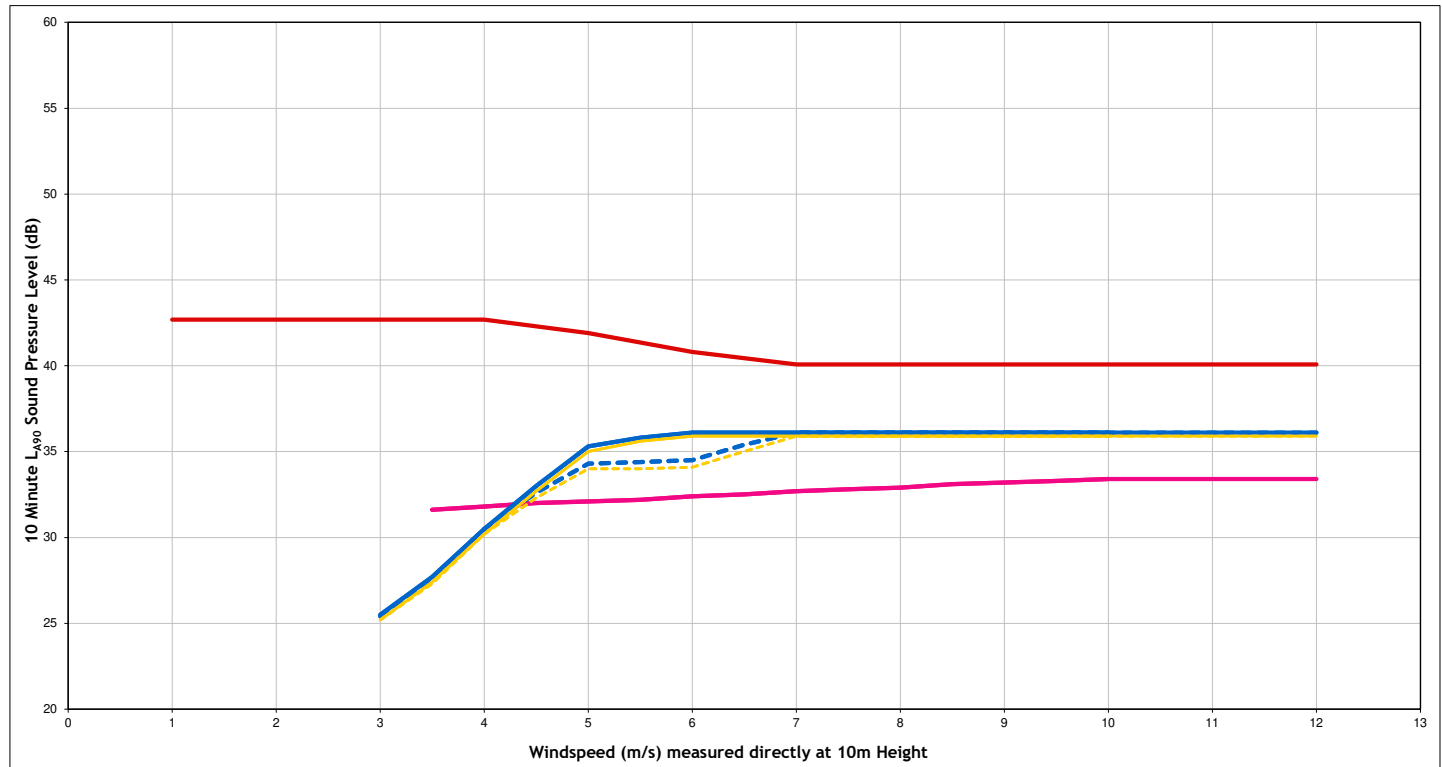
Project	Bears Down Wind Farm Repowering
Client	Clean Earth Energy
Title	Noise Assessment - Site Specific Noise Limit NAL6
Figure Number	Figure A1.3f
Scale	NTS
Drawn	EH
Checked	MC
Date	18/07/2025
Document Reference	16087-ETSU Model



Daytime - Pennatillie (NAL7)



Night Time - Pennatillie (NAL7)



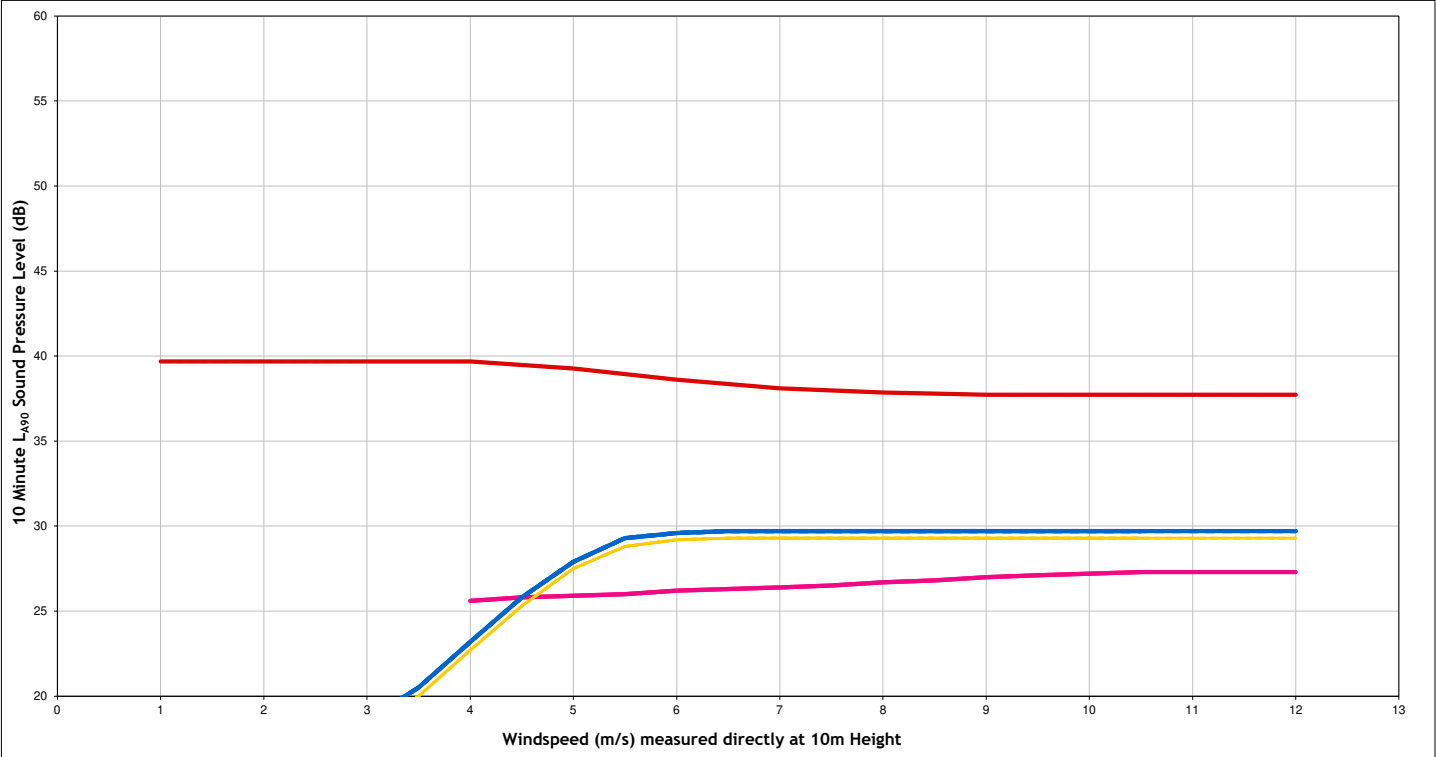
Legend:

- Site Specific Noise Limit for Bears Down Wind Farm Repowering
- Existing Bears Down (16 x Bonus 600kW) [0°]
- Proposed Bears Down Repowering (5 x V136 4.5MW PO4 full mode) [0°]
- - - Proposed Bears Down Repowering (5 x V136 4.5MW mitigated with T5 in S013 at 5-6ms) [0°]
- Proposed Bears Down Repowering without T1 (4 x V136 4.5MW PO4 full mode) [0°]
- - - Proposed Bears Down Repowering without T1 (4 x V136 4.5MW mitigated with T5 in S013 at 5-6ms) [0°]

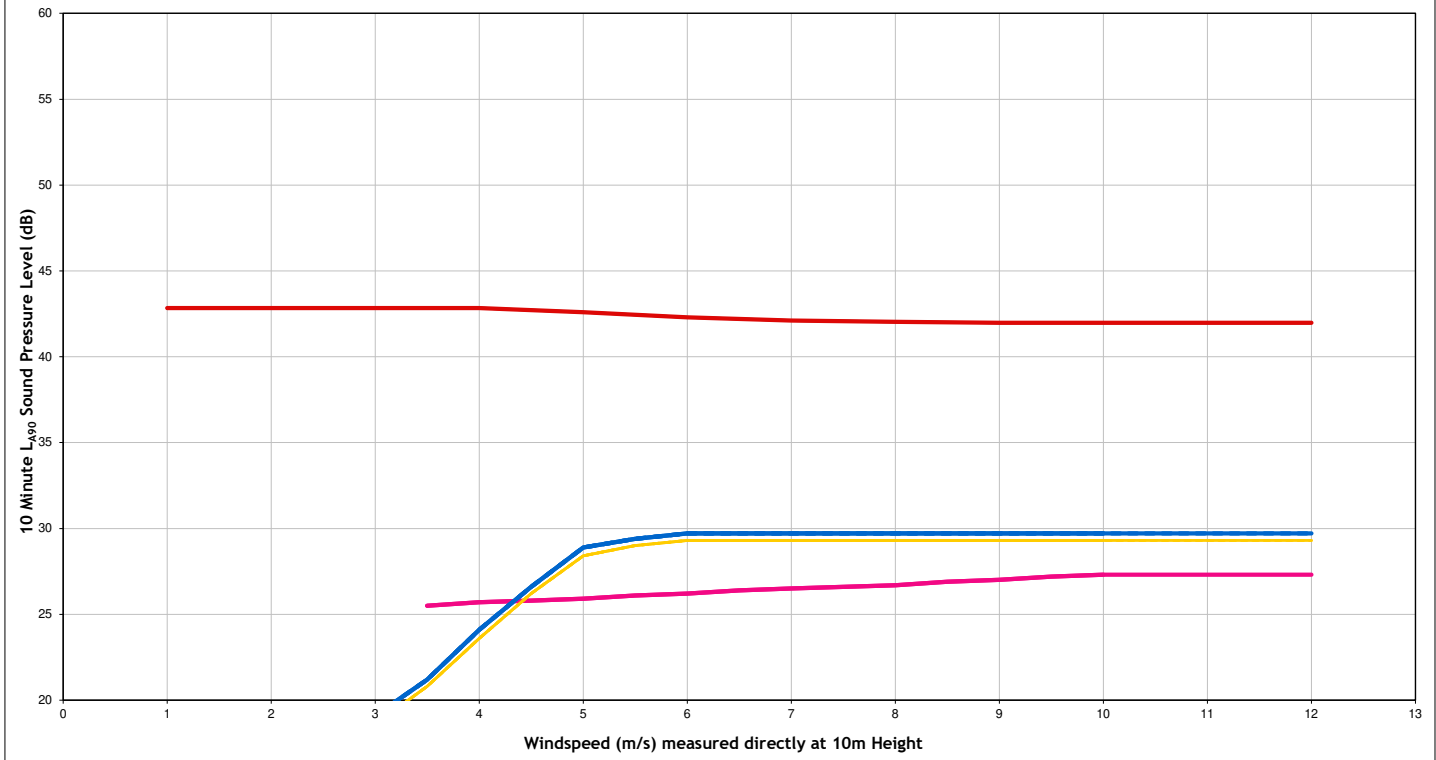
Project	Bears Down Wind Farm Repowering
Client	Clean Earth Energy
Title	Noise Assessment - Site Specific Noise Limit NAL7
Figure Number	Figure A1.3g
Scale	NTS
Drawn	EH
Checked	MC
Date	18/07/2025
Document Reference	16087-ETSU Model



Daytime - Rosedinnick (NAL8)



Night Time - Rosedinnick (NAL8)



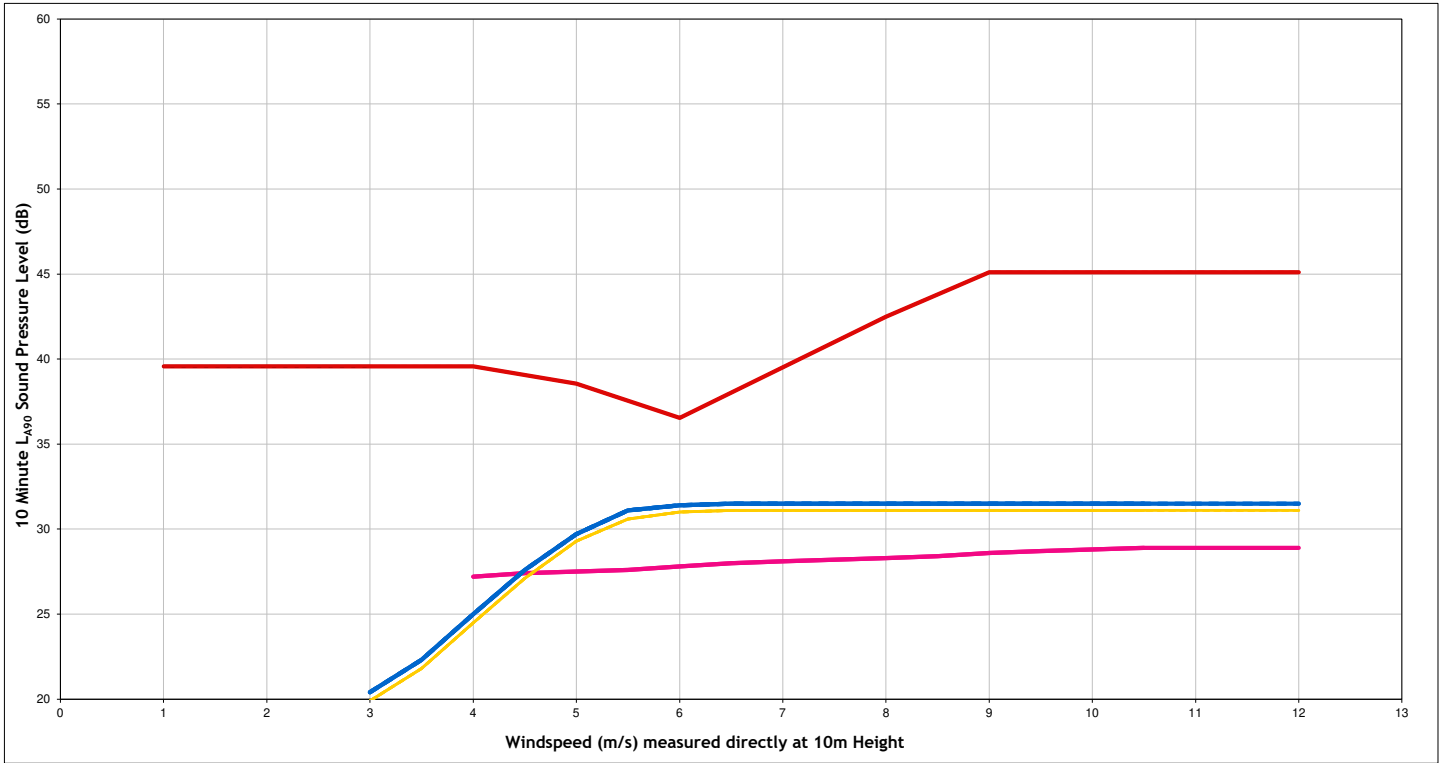
Legend:

- Site Specific Noise Limit for Bears Down Wind Farm Repowering
- Existing Bears Down (16 x Bonus 600kW) [0°]
- Proposed Bears Down Repowering (5 x V136 4.5MW PO4 full mode) [0°]
- Unused(no mitigation required)
- Proposed Bears Down Repowering without T1(4 x V136 4.5MW PO4 full mode) [0°]
- Unused(no mitigation required)

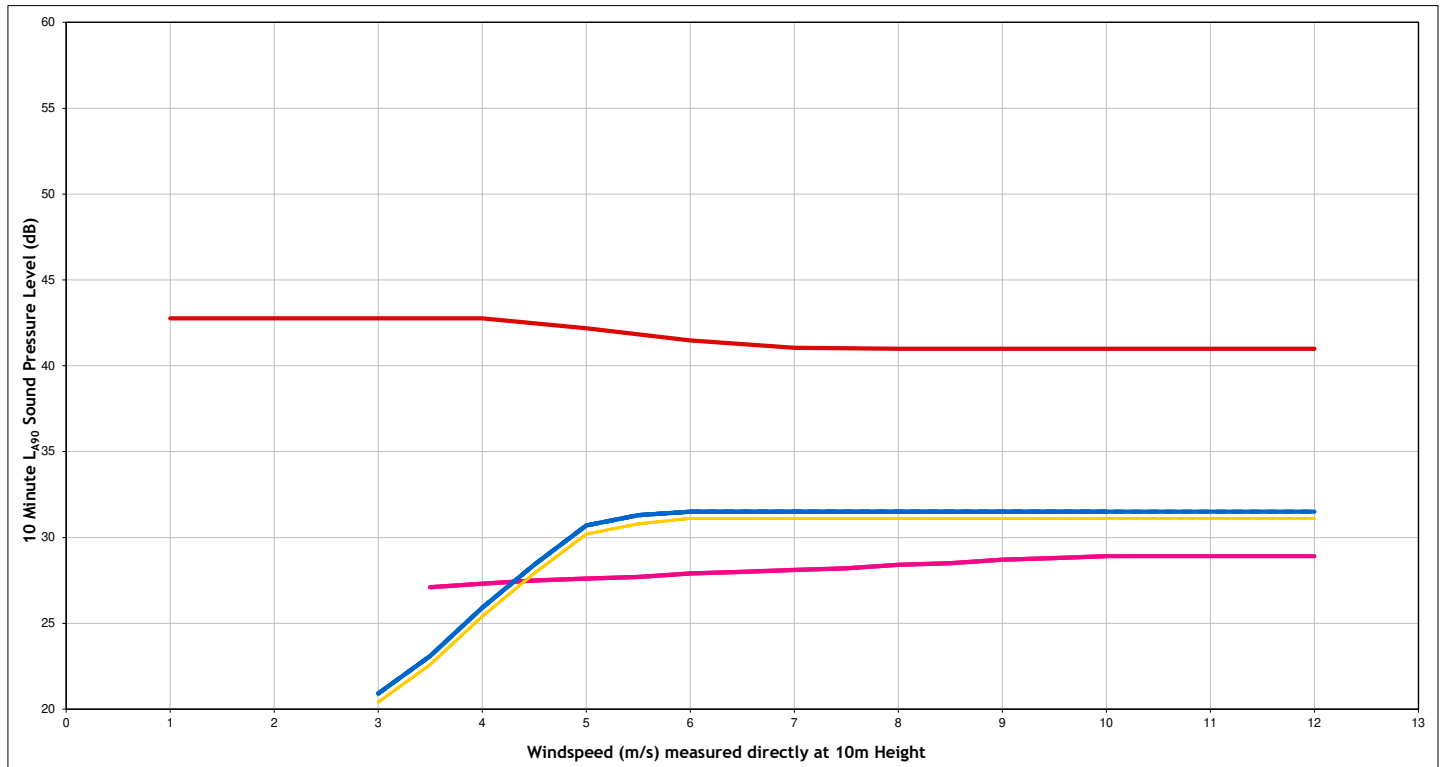
Project	Bears Down Wind Farm Repowering
Client	Clean Earth Energy
Title	Noise Assessment - Site Specific Noise Limit NAL8
Figure Number	Figure A1.3h
Scale	NTS
Drawn	EH
Checked	MC
Date	18/07/2025
Document Reference	16087-ETSU Model



Daytime - Pencrennys (NAL9)



Night Time - Pencrennys (NAL9)



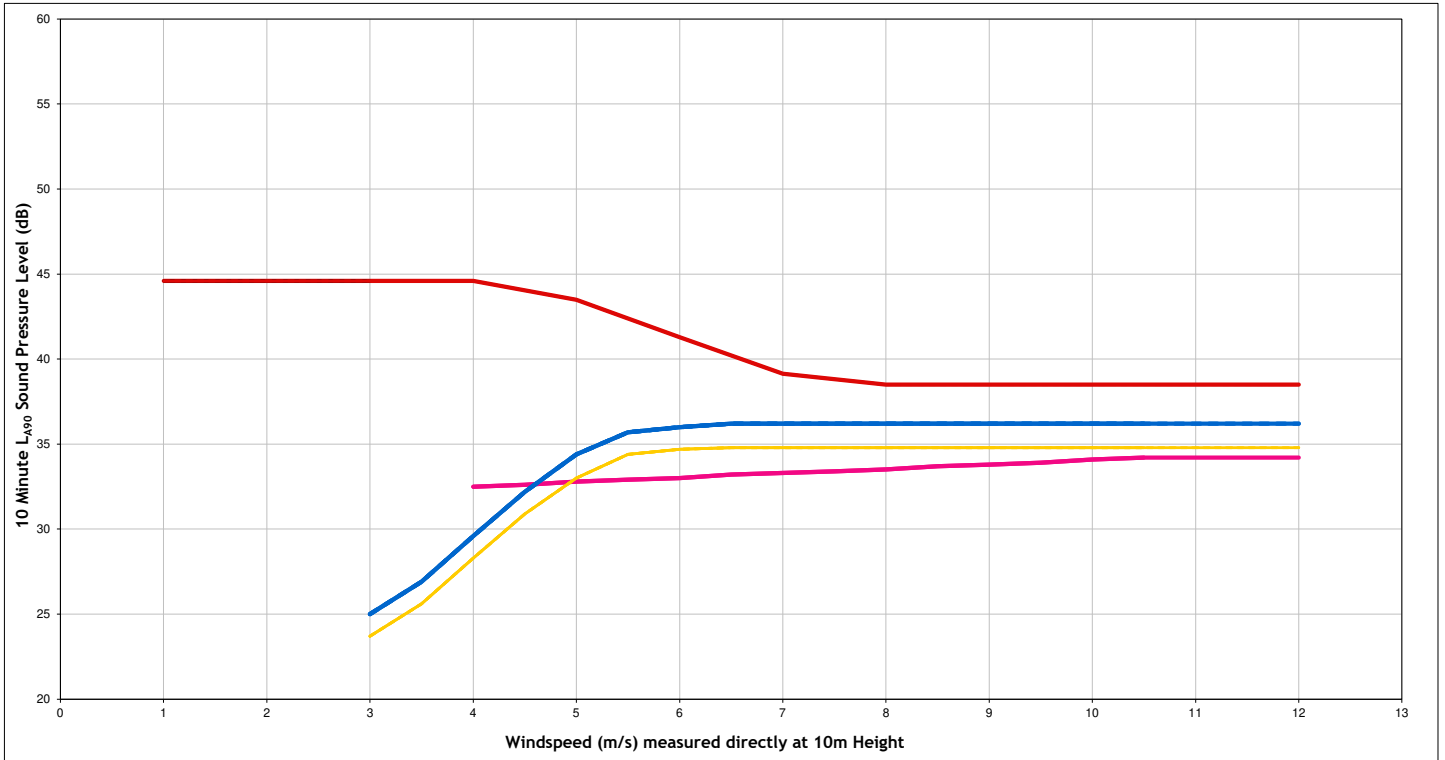
Legend:

- Site Specific Noise Limit for Bears Down Wind Farm Repowering
- Existing Bears Down (16 x Bonus 600kW) [0°]
- Proposed Bears Down Repowering (5 x V136 4.5MW PO4 full mode) [0°]
- Unused(no mitigation required)
- Proposed Bears Down Repowering without T1(4 x V136 4.5MW PO4 full mode) [0°]
- Unused(no mitigation required)

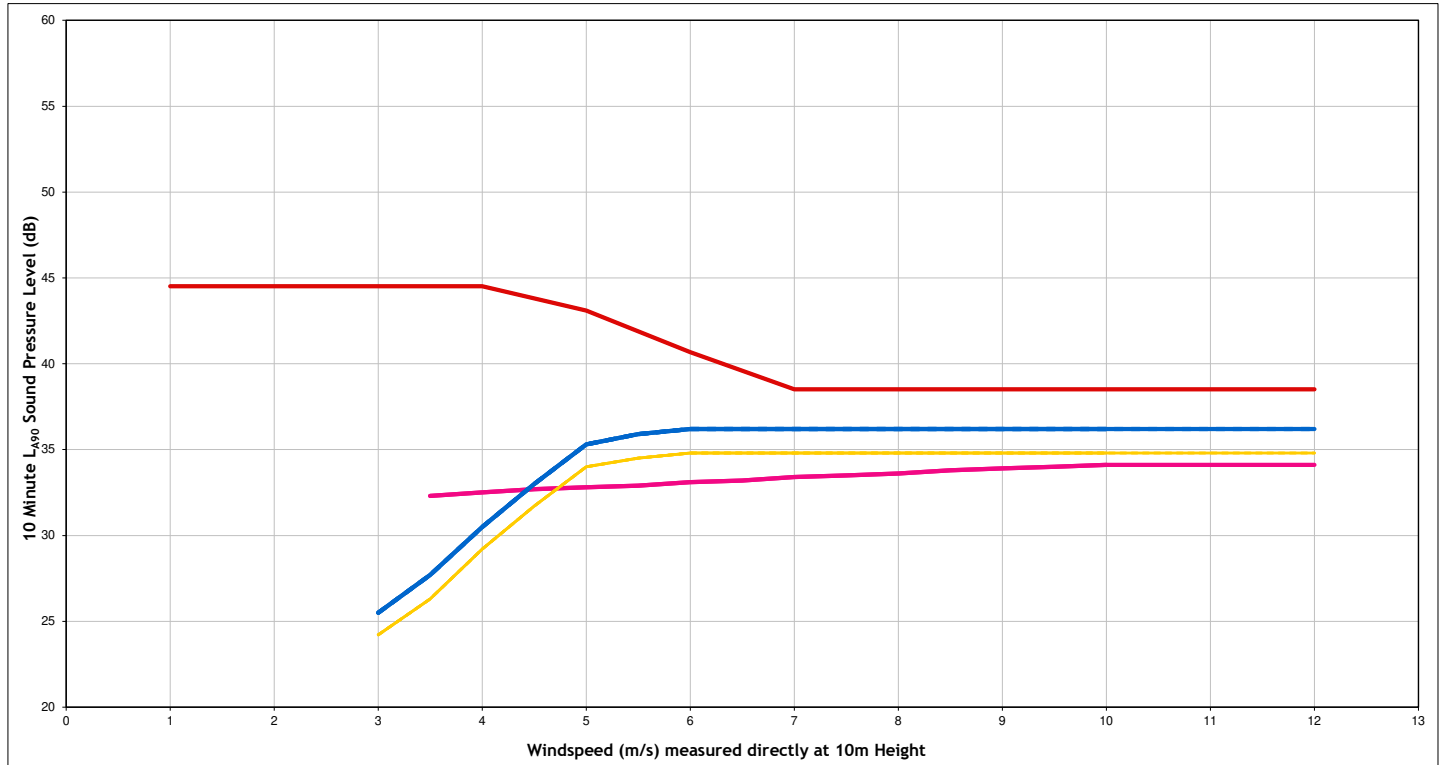
Project	Bears Down Wind Farm Repowering
Client	Clean Earth Energy
Title	Noise Assessment - Site Specific Noise Limit NAL9
Figure Number	Figure A1.3i
Scale	NTS
Drawn	EH
Checked	MC
Date	18/07/2025
Document Reference	16087-ETSU Model



Daytime - Higher Denzell (FI with Denzell Downs) (NAL10)



Night Time - Higher Denzell (FI with Denzell Downs) (NAL10)



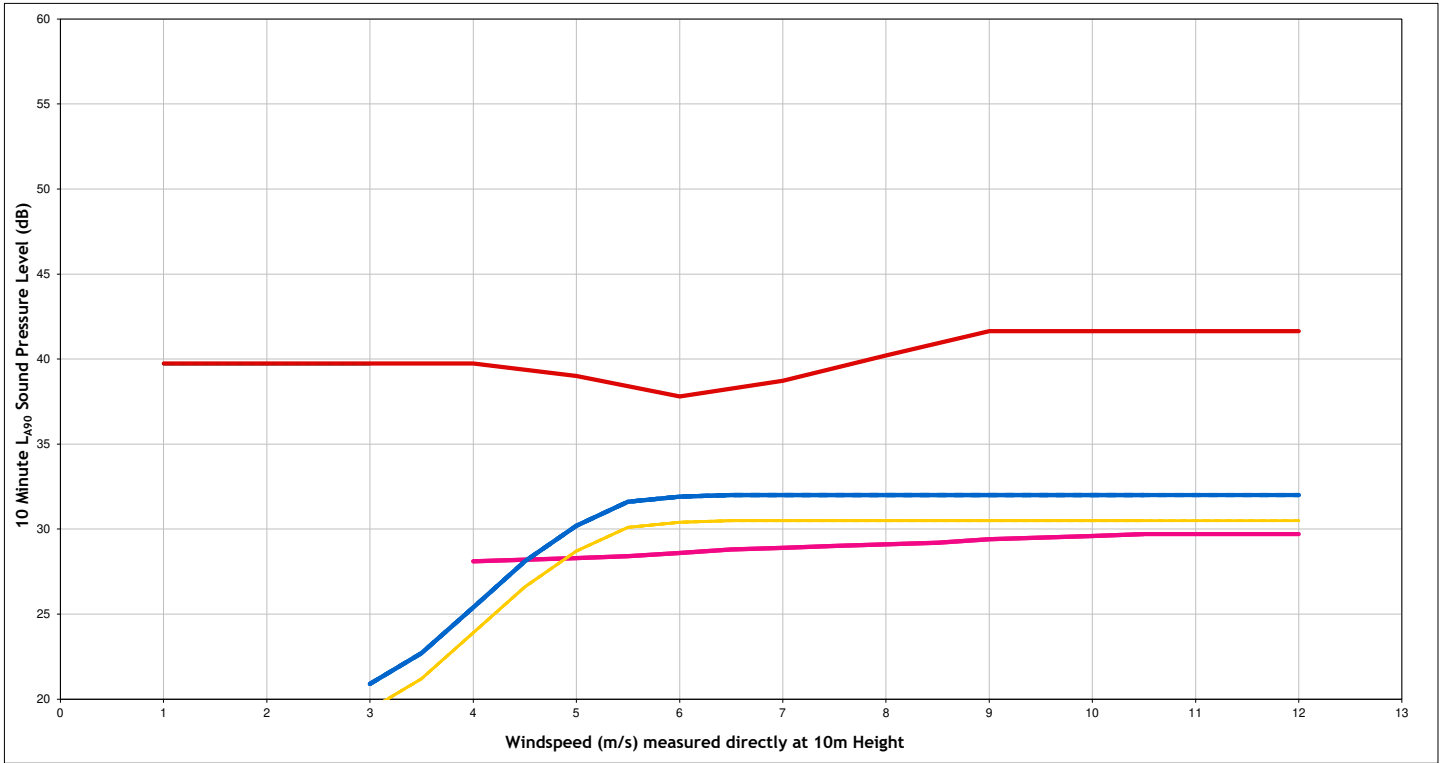
Legend:

- Site Specific Noise Limit for Bears Down Wind Farm Repowering
- Existing Bears Down (16 x Bonus 600kW) [0°]
- Proposed Bears Down Repowering (5 x V136 4.5MW PO4 full mode) [0°]
- Unused(no mitigation required)
- Proposed Bears Down Repowering without T1(4 x V136 4.5MW PO4 full mode) [0°]
- Unused(no mitigation required)

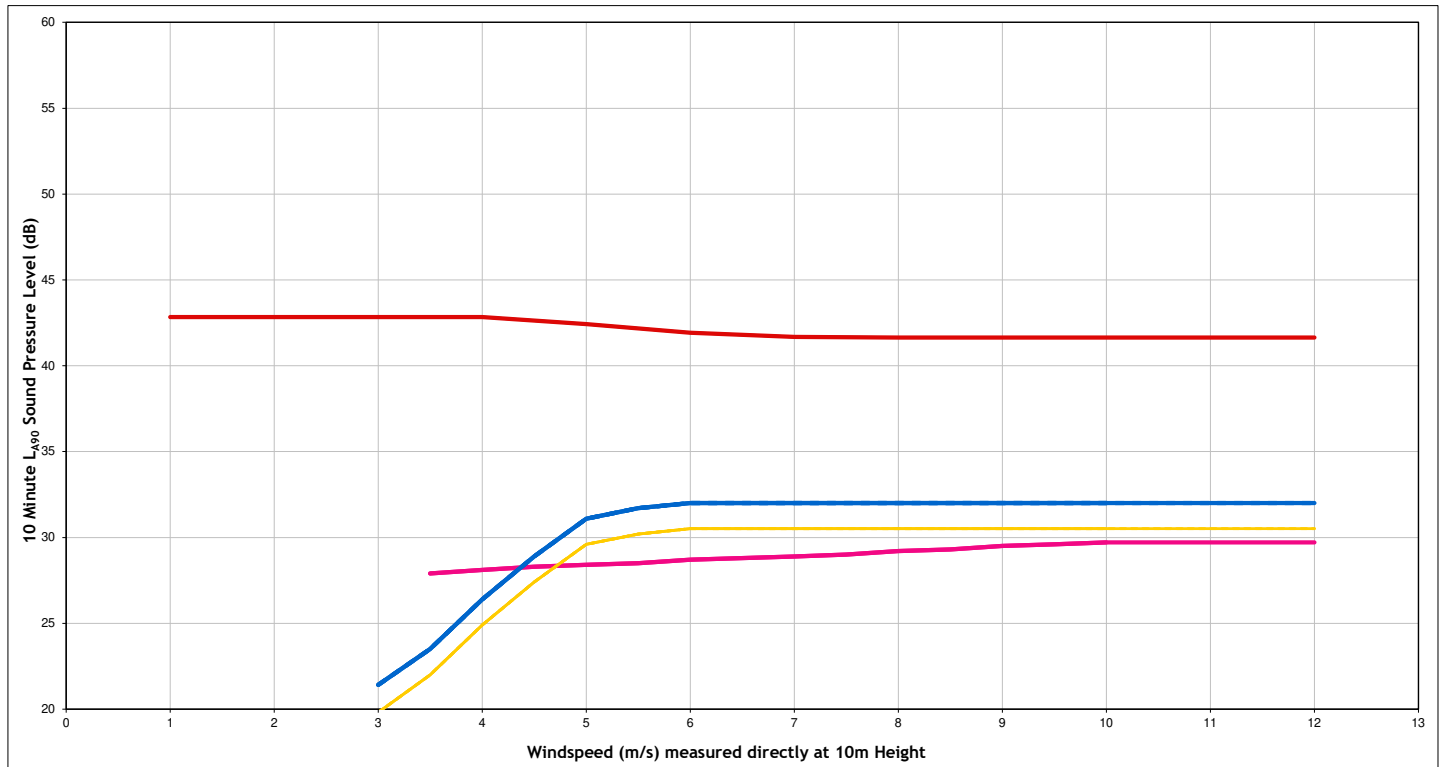
Project	Bears Down Wind Farm Repowering
Client	Clean Earth Energy
Title	Noise Assessment - Site Specific Noise Limit NAL10
Figure Number	Figure A1.3j
Scale	NTS
Drawn	EH
Checked	MC
Date	18/07/2025
Document Reference	16087-ETSU Model



Daytime - Lower Denzell (NAL11)



Night Time - Lower Denzell (NAL11)



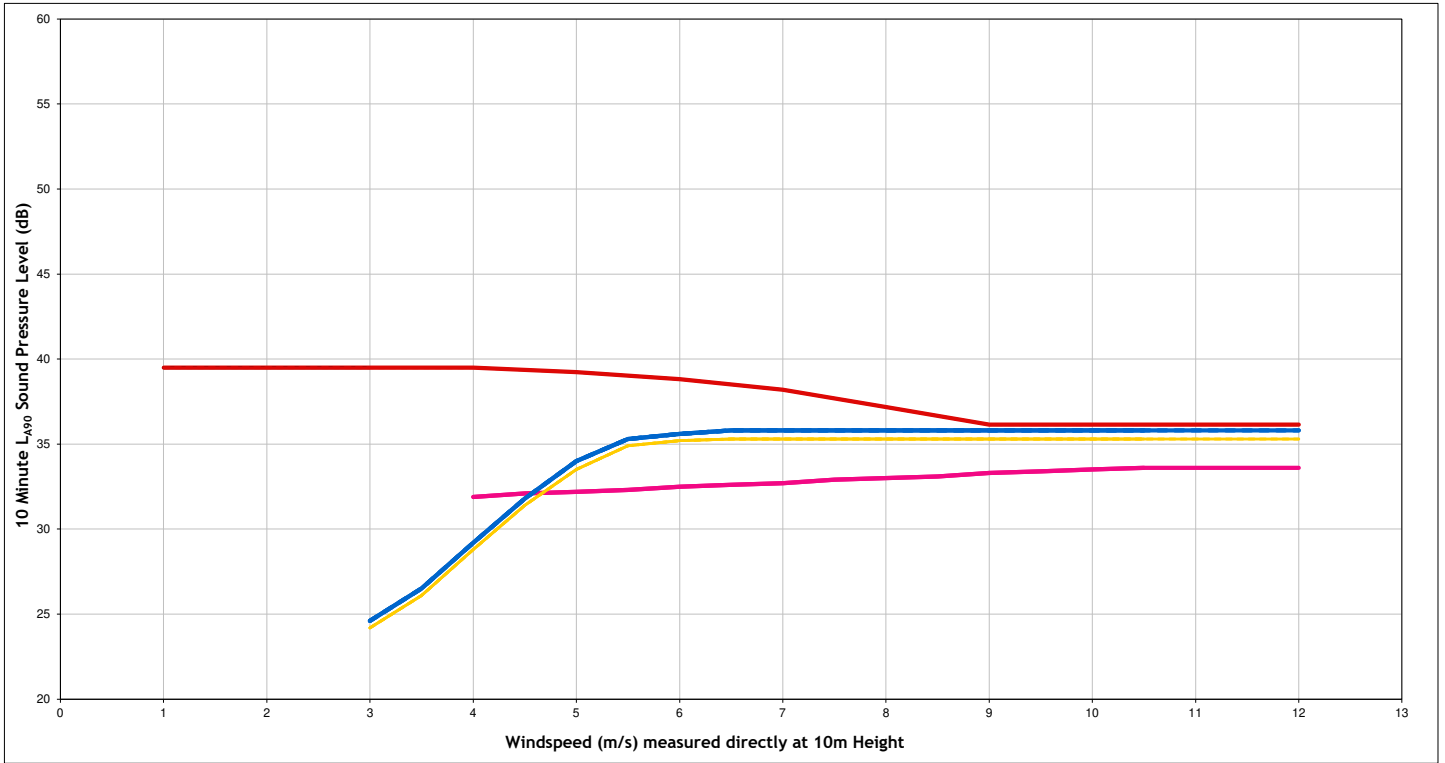
Legend:

- Site Specific Noise Limit for Bears Down Wind Farm Repowering
- Existing Bears Down (16 x Bonus 600kW) [0°]
- Proposed Bears Down Repowering (5 x V136 4.5MW PO4 full mode) [0°]
- Unused(no mitigation required)
- Proposed Bears Down Repowering without T1(4 x V136 4.5MW PO4 full mode) [0°]
- Unused(no mitigation required)

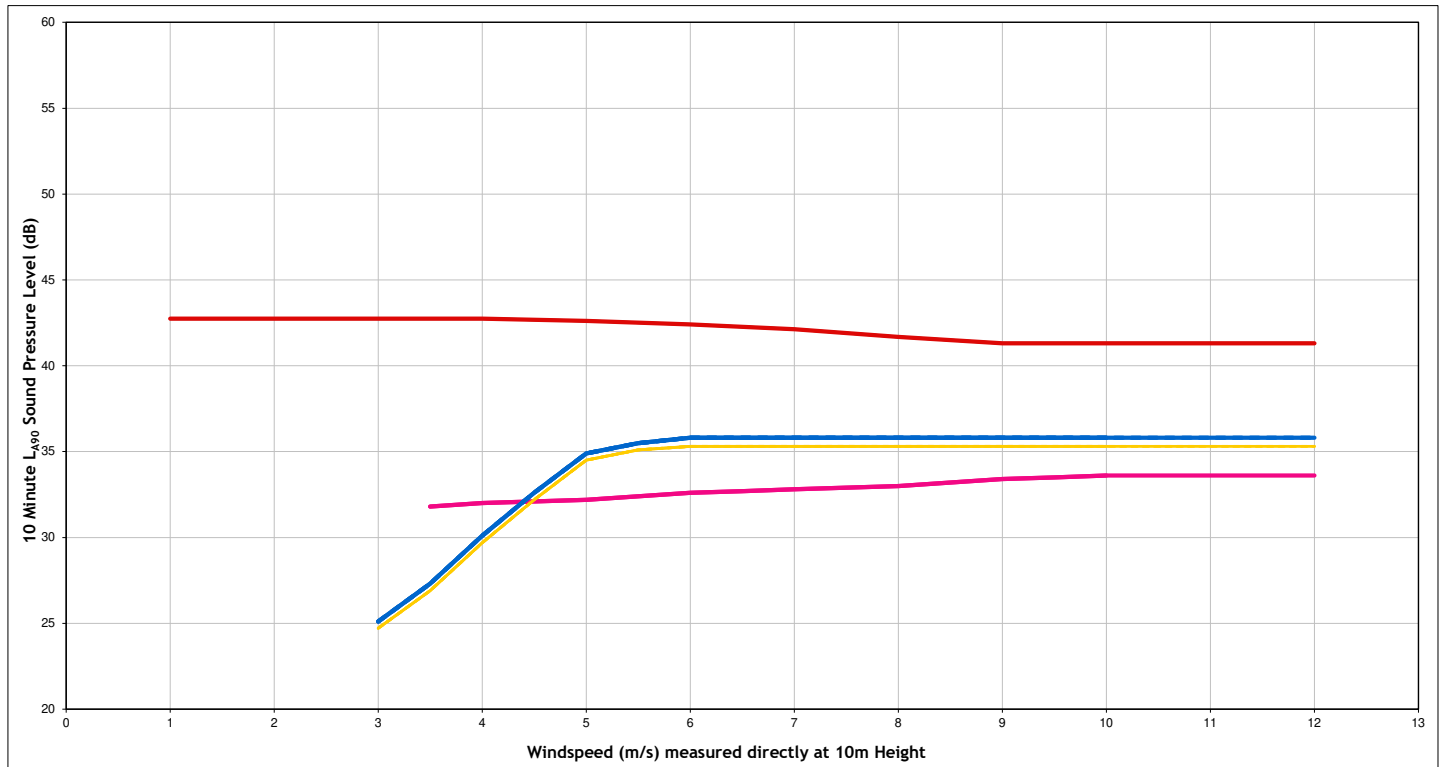
Project	Bears Down Wind Farm Repowering
Client	Clean Earth Energy
Title	Noise Assessment - Site Specific Noise Limit NAL11
Figure Number	Figure A1.3k
Scale	NTS
Drawn	EH
Checked	MC
Date	18/07/2025
Document Reference	16087-ETSU Model



Daytime - Trevibban farm (NAL12)



Night Time - Trevibban farm (NAL12)



Legend:

- Site Specific Noise Limit for Bears Down Wind Farm Repowering
- Existing Bears Down (16 x Bonus 600kW) [180°]
- Proposed Bears Down Repowering (5 x V136 4.5MW PO4 full mode) [180°]
- Unused(no mitigation required)
- Proposed Bears Down Repowering without T1(4 x V136 4.5MW PO4 full mode) [180°]
- Unused(no mitigation required)

Project	Bears Down Wind Farm Repowering
Client	Clean Earth Energy
Title	Noise Assessment - Site Specific Noise Limit NAL12
Figure Number	Figure A1.3I
Scale	NTS
Drawn	EH
Checked	MC
Date	18/07/2025
Document Reference	16087-ETSU Model

