



<b>Project:</b> Cronalaght demonstration - Module descriptions	<b>Description:</b> The project has been modified to demonstrate WindPRO functionalities.	<b>Printed/</b> Page 06-01-2010 15:39 / 2  <b>Licensed user:</b> EMD International A/S Niels Jernesvej 10 DK-9220 Aalborg Ø +45 9635 4444 Thomas Sørensen, ts@emd.dk Calculated: 06-01-2010 15:38/2.7.424
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## OPTIMIZE - Optimize result

Calculation: Optimize demonstration calculation

### Calculated Annual Energy for each of 3 new WTGs with total 9,0 MW rated power

WTG type	Valid	Manufact.	Type-generator	Power, rated	Rotor diameter	Hub height	Power curve Creator	Name	Annual Energy		Park	
									Result	Result-10,0%	Efficiency	Mean wind speed
				[kW]	[m]	[m]			[MWh]	[MWh]	[%]	[m/s]
1 Yes	VESTAS	V90-3.000	3.000	90,0	80,0	EMD	Level 0 - - 109.4 dB(A) - 08-2008		16.050,9	14.446	99,6	11,63
2 Yes	VESTAS	V90-3.000	3.000	90,0	80,0	EMD	Level 0 - - 109.4 dB(A) - 08-2008		15.931,4	14.338	100,2	11,58
3 Yes	VESTAS	V90-3.000	3.000	90,0	80,0	EMD	Level 0 - - 109.4 dB(A) - 08-2008		15.773,3	14.196	99,6	11,57

### WTG siting

IG	East IG	North	Z [m]	Row data/Description
2 New	186.595,0	423.071,0	249,1	VESTAS V90 3000 90.0 !O! hub: 80,0 m (14)
3 New	186.195,0	424.121,0	311,7	VESTAS V90 3000 90.0 !O! hub: 80,0 m (15)

# OPTIMIZE

Optimizing a Wind Farm Layout



WindPRO version 2.7.424 Beta Jan 2010

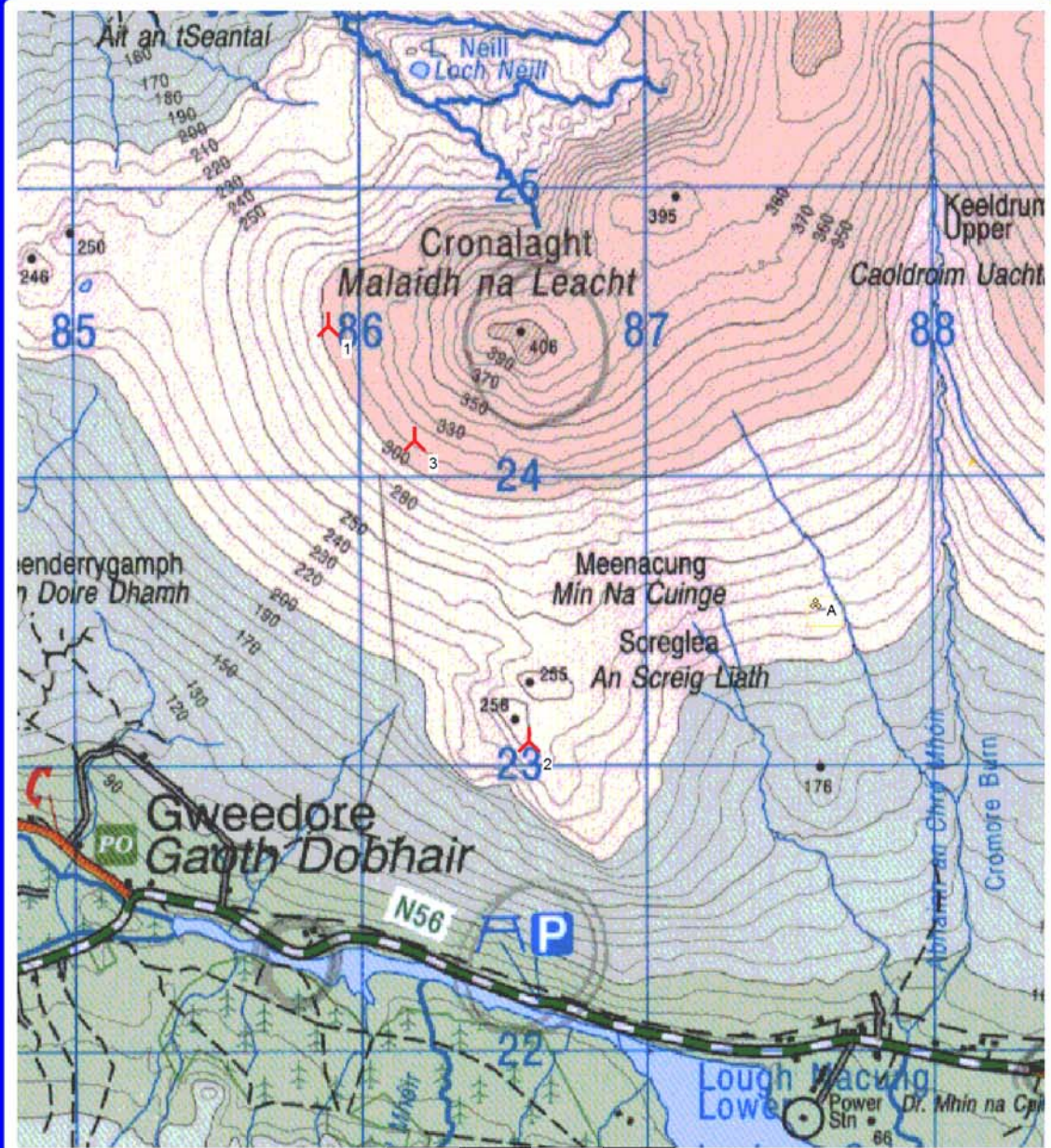
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Licensed user:  
EMD International A/S  
Niels Jernesvej 10  
DK-9220 Aalborg Ø  
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## OPTIMIZE - Map

Calculation: Optimize demonstration calculation



0 250 500 750 1000m

Map: Gweedore , Print scale 1:20.000, Map center Irish Grid East: 186.571,6 North: 423.617,6

▲ New WTG

▲ WTG area(s)

WindPRO is developed by EMD International A/S, Niels Jernesvej 10, DK-9220 Aalborg Ø, Tlf. +45 96 35 44 44, Fax +45 96 35 44 46, e-mail: windpro@emd.dk