

BLUE POWER PARTNERS

Iceland Measurement Campaign 16/11/2023

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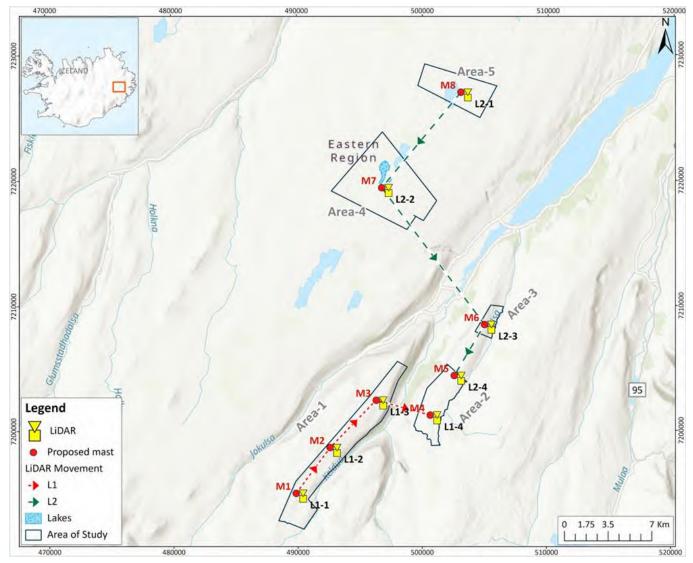
INTRODUCTION

- •Fjardarorka intends to install meteorological measuring devices in the Fljótsdalshreppur area for the conducting of a wind measurement campaign.
- •In wind energy projects, a measurement campaign is required during the early development stages of a project for the collection and analysis of wind conditions data from representative locations of the area.
- •Fjardarorka intends to perform the measurement campaign in Fljótsdalshreppur for a period of 24 months by installing and operating wire lattice met masts and Lidar devices inside the project boundaries where it is intended to deploy wind energy production.
- •Fjardarorka expresses its commitment to ensuring that the installation, operation, maintenance and dismantling of the devices will comply with all regulatory requirements and standards.

	Start	Finish	Duration
Site visit	15-11-23	16-11-23	2 days
Lidar installation	01-06-24	05-05-24	5 days
Met mast Installation	03-06-24	02-08-24	8 weeks
Measuring campaign	05-08-24	05-08-26	24 months
Met mast and Lidar removal	10-08-26	31-08-26	3 weeks

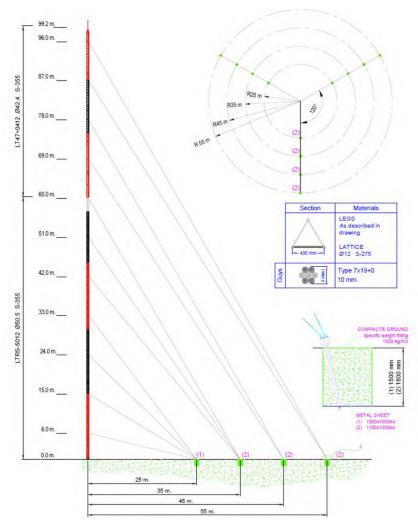
Preliminary schedule for the measuring campaign

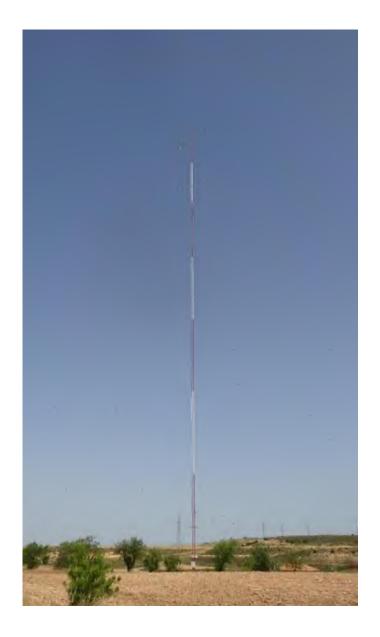
Measurement campaign

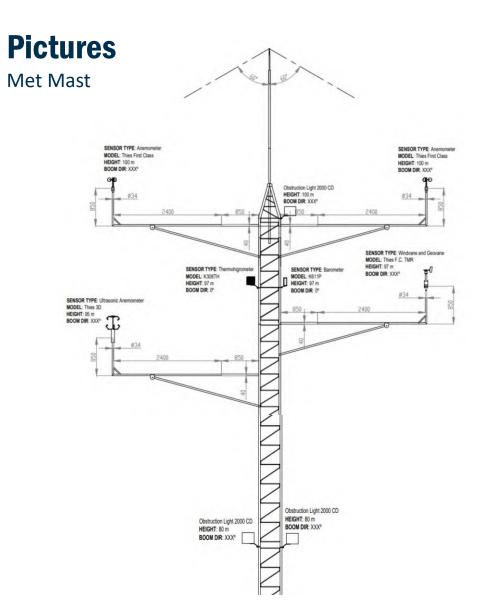


Pictures

Met Mast dimensions (99 m)







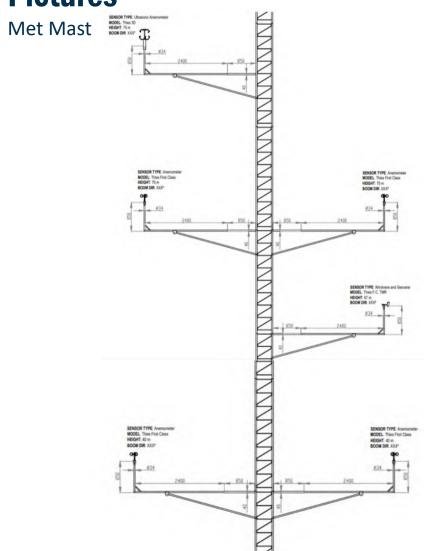




Obstruction light high intensity 2000 CD



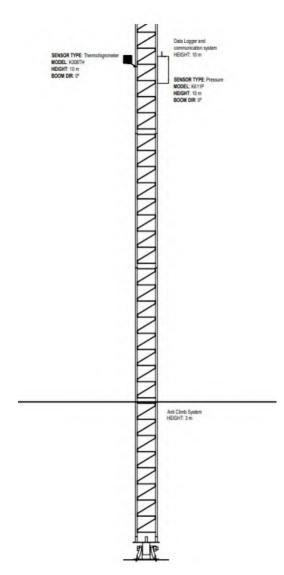
Obstruction light medium intensity 32 CD







Met Mast





Cabinet with data logger and communication system



Anticlimbing system

List of Main Equipment

Sensors, lights and Data logger

Equipment per tower	Units	
Anemometer	6	
Ultrasonic anenometer	2	
Windvane	2	
Barometer	1	
Thermohygrometer	2	
Obstruction lights	3	
Data Logger	1	



Anemometer



Pressure Sensor



Windvane



Thermohygrometer



Soft soil



Rock soil

Cabinet – Core Box



Exterior of cabinet



Interior of cabinet



Data logger Display

LIDAR









Sub-contractor requirements on site

- Warehouse where to storage goods near to the installation site (probably in Fljótsdalshreppur): Is necessary to find a warehouse near to installation sites where to unload material from containers coming from Spain. The warehouse should have at least 300 m2 to store the goods also can be an open space.
- Offload material from containers to the warehouse: Is necessary to find resources to unload the containers in the warehouse. It will be necessary a pallet truck with long nails, forklift with long nails and 2 persons to be able to unload the merchandise from the containers to the warehouse. (this works is commonly do it by Measwind but in case good will be shipped before installations, will be needed to do by a local contractor)



Transport of goods from warehouse to installation site: Is necessary to find a small truck to transport the goods from the warehouse to the installation site. The truck should be minimum 5 m.





• Excavator for civil Works: It will be necessary to find a mix excavator with a hydraulic hammer to be able to make the foundations of the tower.

Warehouse

Offload and Warehouse



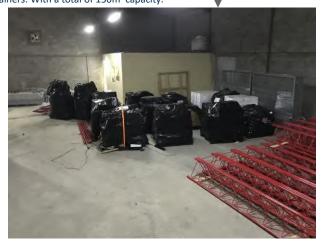
 All the material will be shipped to Fljótsdalshreppur in 4 containers. With a total of 150m³ capacity.



Lidars will be offload with a pallet truck of 1800mm and 3.000kg
from the cointainers to the warehouse



Met masts will be offload with a small truck of m\u00ednimum 5m from the cointainers to the warehouse



4. All the material will be saved on a Warehouse. The space will have a minimum of 300 m² that can be open air or covered, with covered being the priority for security reasons.



5. All the material will be saved on a Warehouse The space will have a minimum of 300 m² that can be open air or covered, with covered being the priority for security reasons.

1 – Excavation and anchors





2 – First level of the tower







3 – Rest of the tower with sensors







Met Mast Civil Work Processing

4 – Other secundary equipment: obstruction lights, solar panels...





5 – Comissioning





Maintenance

During each preventive maintenance visit the following items will be checked:

Met mast

- General inspection of the tower
- Orientation of tower
- Visual inspection of the tower, connections, etc.
- Battery charge status and cleaning solar panels
- Assessment of damage caused by trespassers and repairs
- Fuel cell refill

Lidar

- Antifreeze refill for sensor wipers
- Change of wiper blade
- Window cleaning
- Fuel cell refill

Preventive Maintenance	Date	Duration
Preventive Maintenance 1	Oct-24	1 Week
Preventive Maintenance 2	May-25	2 Weeks
Preventive Maintenance 3	Oct-25	1 Week
Preventive Maintenance 4	May-26	2 Weeks

Health and safety

Full body harness & Shock absorbing lanyard (Double Hook)



Gloves



Positioning Line



Safety sunglasses/Eyewear



Chin strap safety helmet



High Visible Vest



Safety shoes

