Akershus energi

Summary of Winterwind 2023

Lars Tallhaug

Akershus Energi

- Publically owned Utility
- 19 Hydro power stations. 2.4 TWh
- 1 Wind farm 0.5 TWh

Odal Wind Farm

Cloudberry

klp

Akershus energi

34 x 5.0-145 SiemensGamesa

Åre

Winterwind 2023

Winterwind - #16

Cecilia Dalman Eek

Per Olofson

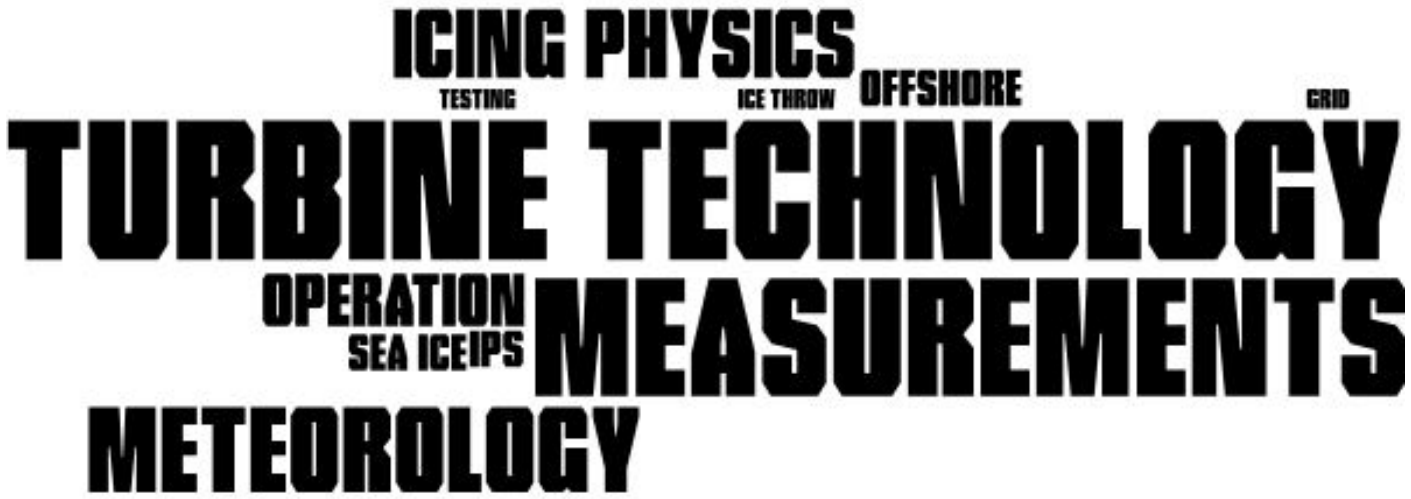
Mari-Loise Wernerson

Göran Ronsten

Partisipants

- At least 17 different countries
- 47 % from Sweden

Presentations - categories



- 39 different presentations including poster presentations

Presentations - category

Meteorology
5

Ice
modelling
3

Measurements
7

Turbine
technology
14

Operation
4

Grid
1

Offshore
4

Ice throw
1

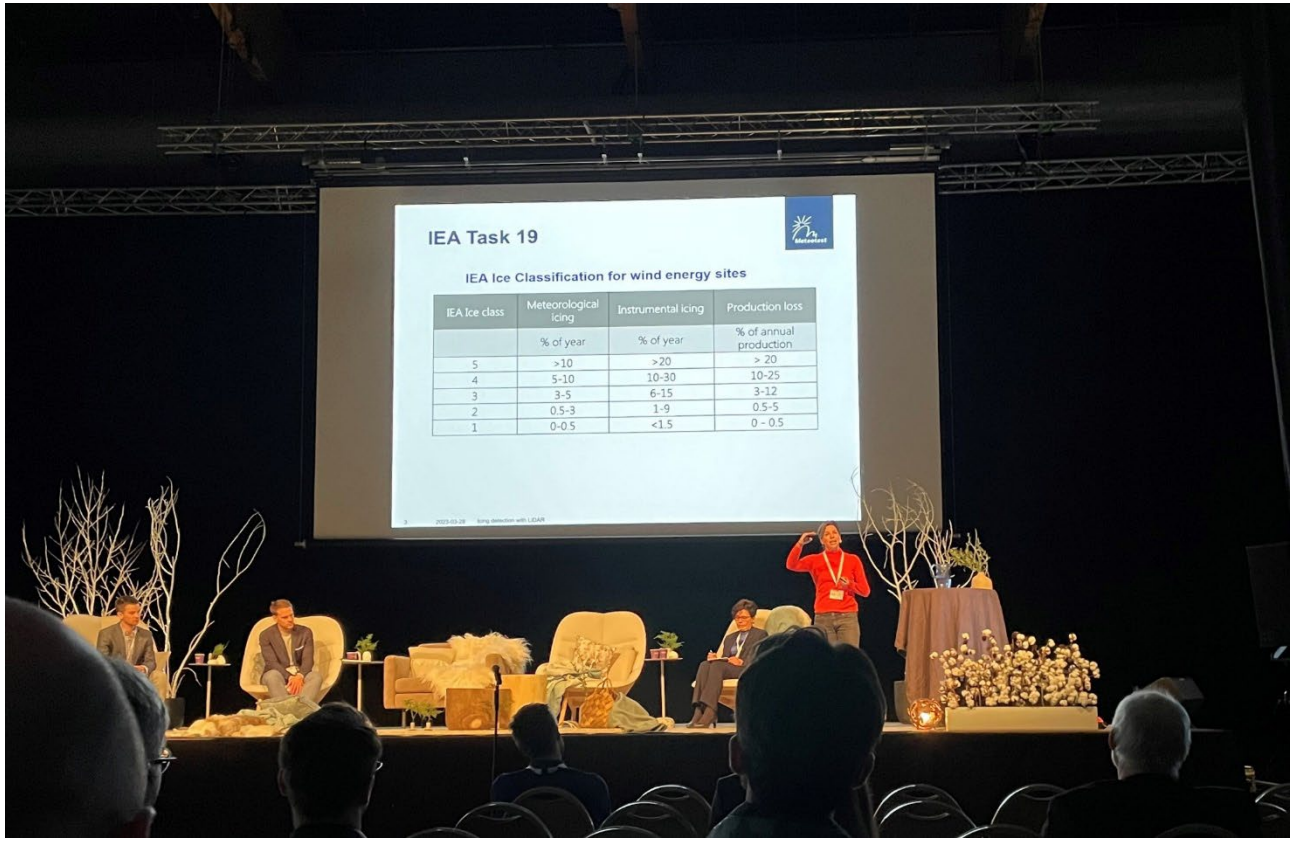
Presenters - nationality

- From 14 different countries

Exhibitors

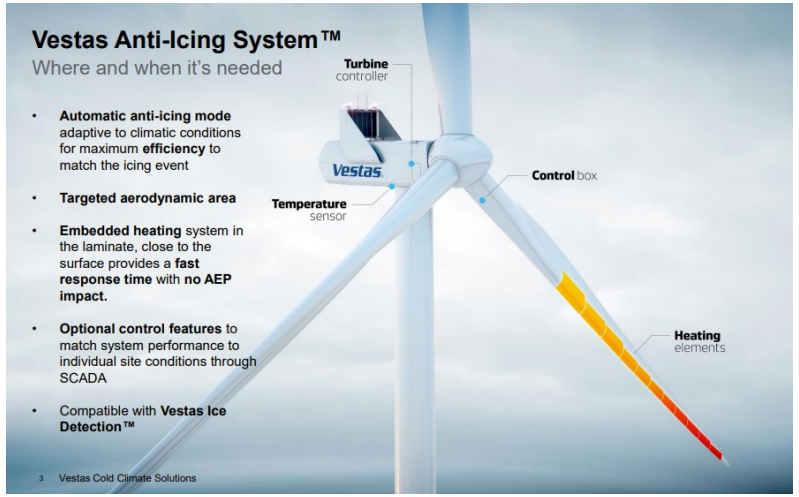

ENERGY PRODUCER
RED ORGANIZATION
CONTROL SYSTEMS
CONSULTANT
IPS
AUTOMATION
MEASUREMENTS
ENERGY TRADER
SUB SUPPLIER

Highlight 1: IEA Ice Classification (warning: brag)



Modifications proposed by Université Laval

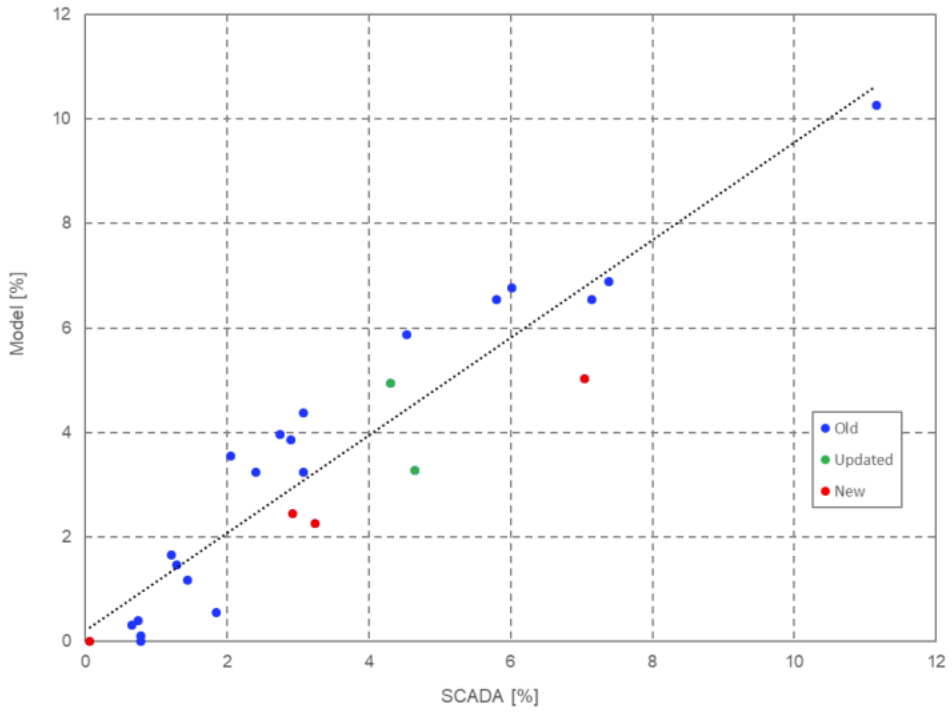
Highlight 2: Turbine manufacturers



Highlight 3: Operational experience

IceLoss 2.2 calibration/validation

- 4 sites added
- Updated SCADA analysis in 2 sites



KJELLER VINDTEKNIKK
En del av Norconsult

Highlight 4: Sub-suppliers

- A lot of important innovation starts with the sub-suppliers
- Lightning protection
- Coating with good results
- Indirect icing sensors

Winterwind 2024

- I hope it will take place
- Continue the strong fucus on technical issues
- Focus on sharing operational experience as far as possible
- A separate session for the risk for ice throw
- Continue to attract participants outside the Nordics
- Make sure the sky is blue