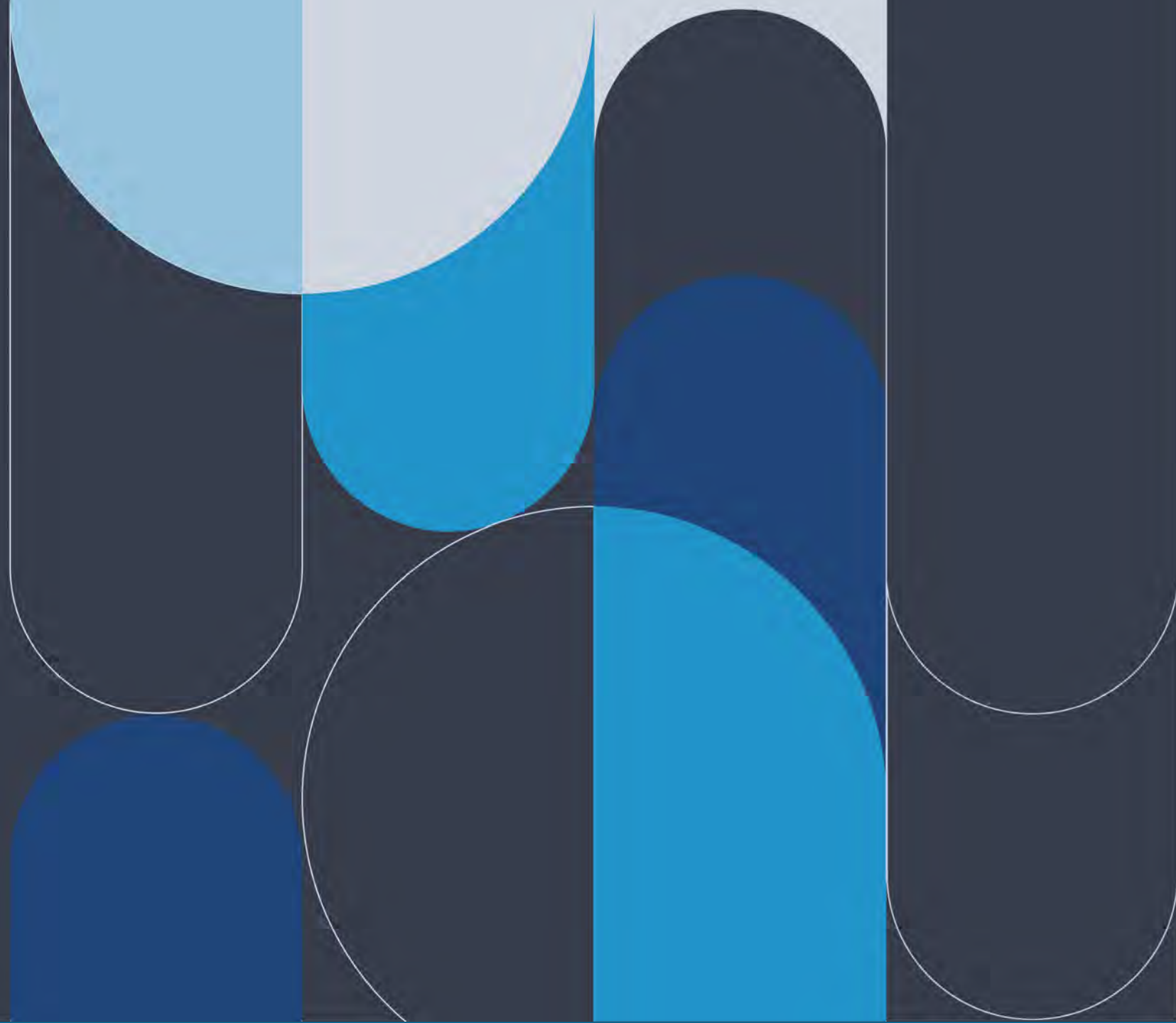




Wind Technology

NOVEMBER 1 2023

Wind turbine failures on- and offshore



Morten H. Jensen

Working on breakdown, inspections and incident situations for more than 25 years on wind turbines throughout the world. Also advising leading wind turbine manufactures in connection with R&D and loss prevention.

Specialities

- Designing high-voltage installations and supervision and building management of same.
- Client consultation in the high-voltage field, including lighting.
- Breakdown, inspections and incident situations on wind turbines including acting as Loss Adjuster in claims relating to 500+ wind turbines on behalf of insurers worldwide including Lloyds of London market and has handled the repair of generators at decentralised power stations, typical capacities from 800 kW to 10 MW.
- Advising and cooperating with the Danish national wind turbine center Risø



Memberships:

DV (Danmarks Vindmølleforening – Danish Wind Turbine Assoc.)
Member of Acceptance Committee, Expert Witness
Danish Association of Loss Adjusting Experts (FUEDI-ELEA)

Specialties

Professional technical services for the wind-energy industry in areas such as:

- ✓ Turbine failures / Causal investigations
- ✓ Professional expertise in connection with operation and repair
- ✓ Assistance in selecting sub-contractors for repair and maintenance work and repair of components
- ✓ Assessment of claims on behalf of insurers
- ✓ Property assessment reports
- ✓ Advising leading wind turbine manufactures in connection with R&D



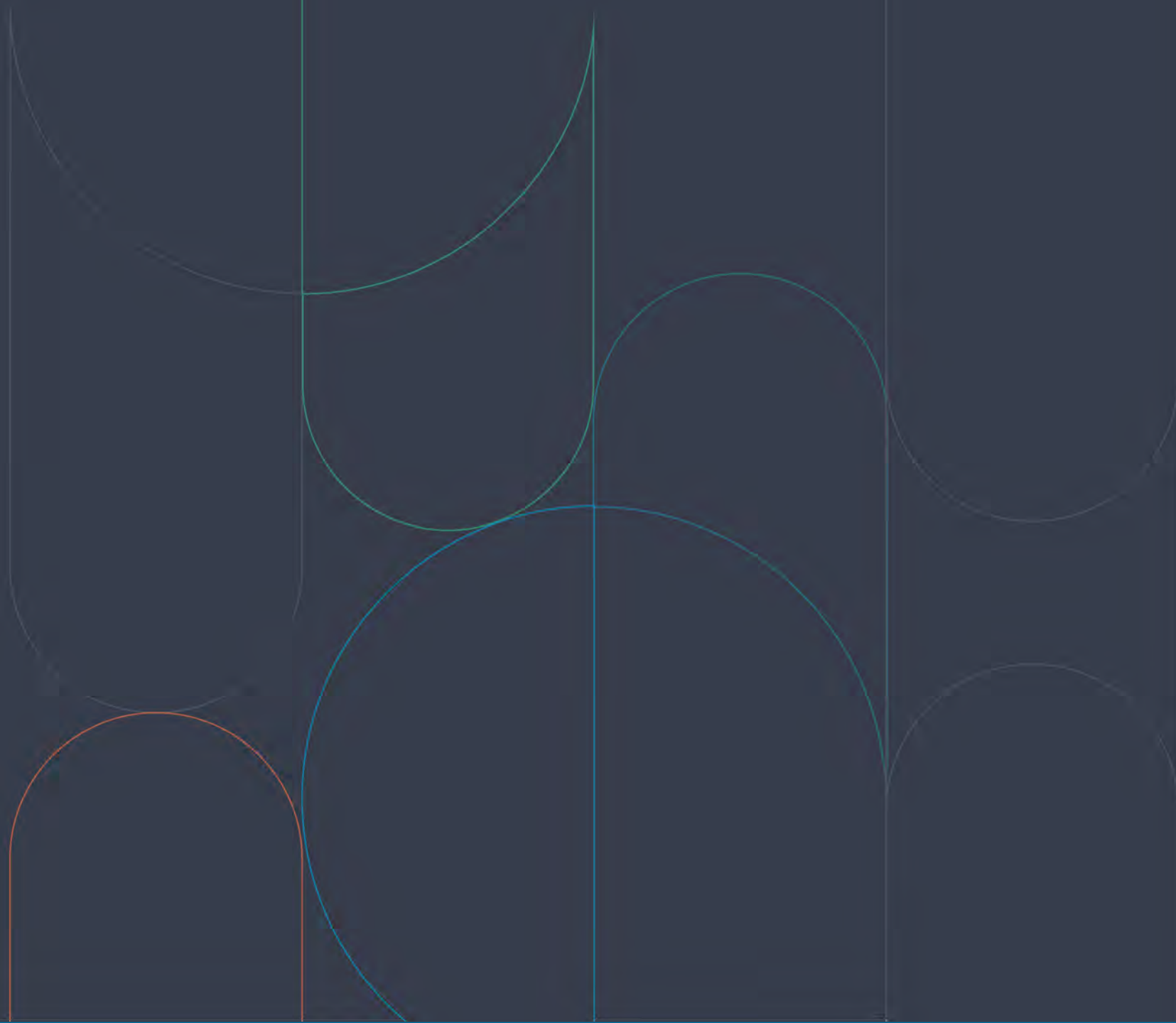
On-site inspections and RCA-work performed by Morten H. Jensen

Adjusting experience from all over the world – wind turbine claims



Denmark	China	Philippines
Norway	Japan	Brazil
Sweden	Korea	Uruguay
Faroe	USA	Argentina
Islands	Canada	South Africa
Poland	Costa Rica	Italy
Ukraine	England	Malta
Holland	Scotland	Hungary
Germany	Ireland	Romania
Spain	India	Guatemala
Portugal	Australia	Chile
Greece	New Zealand	Mexico
Egypt	Tasmania	

Examples of
failures and
break-down
situations



01

SAMSØ OFF-SHORE
WIND

Tower / Nacel flange
failure



SAMSØ OFF SHORE WIND

Morten H. Jensen was the owner's advisor covering operation and maintenance of the ten 2.3 MW wind turbines.



02

HORNS REV

Nacel fire claim



Horns Rev - Fire damage to nacelle



In 2013 and 2014 fire occurred in turbines T32 and T8 respectively.

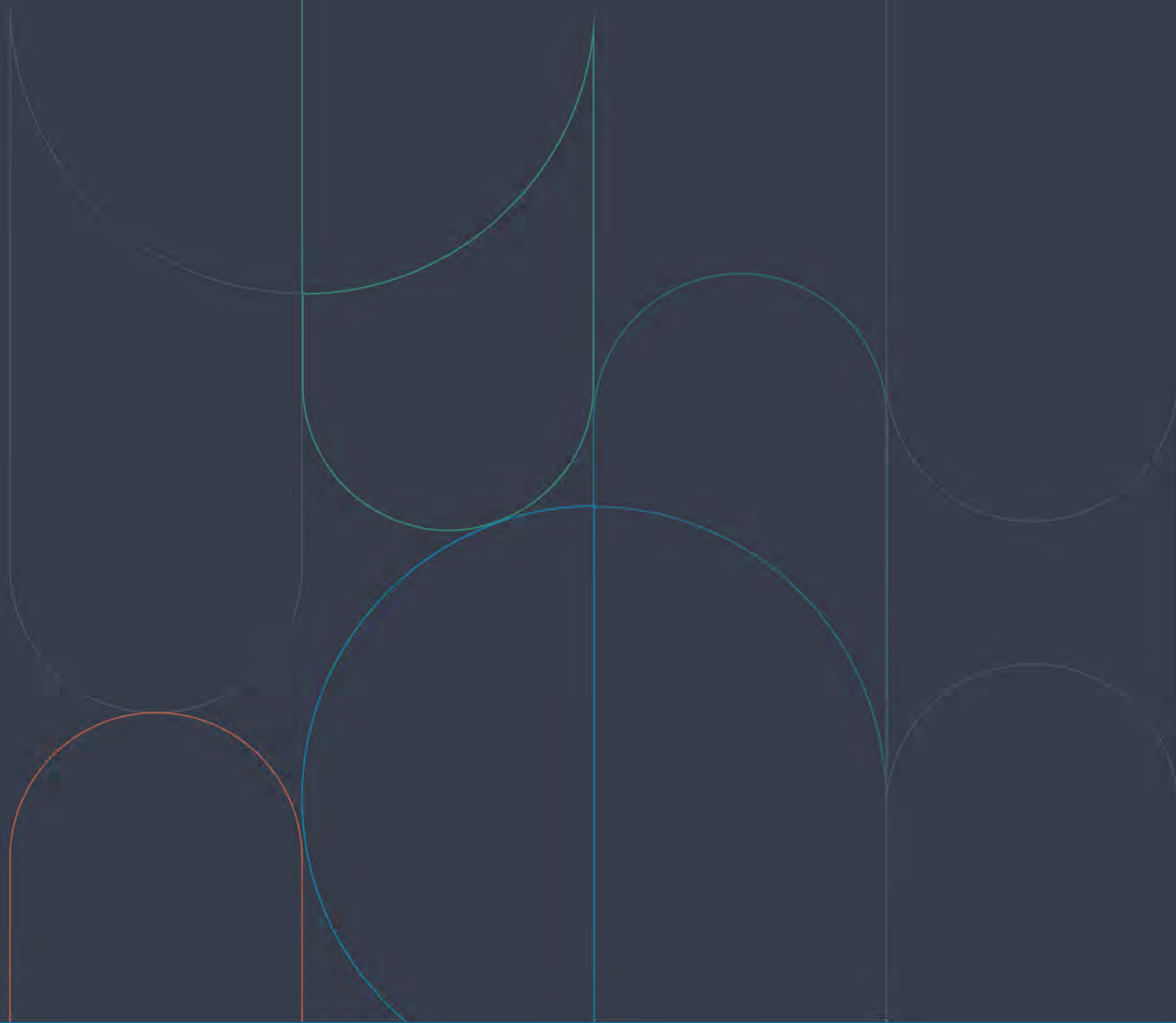
We were involved as Loss Adjusters on behalf of the insurer and as contact with Vattenfall, including Causal Investigation.

An extensive investigation identified the cause as an instant fire in capacitors for harmonic filters and single-phase fan motor.

Vattenfall has since used this information to ensure that no future losses from this type of fault can occur in future.

Total collapses

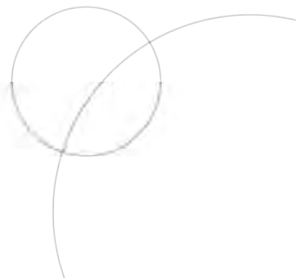
03





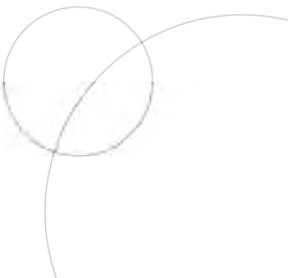


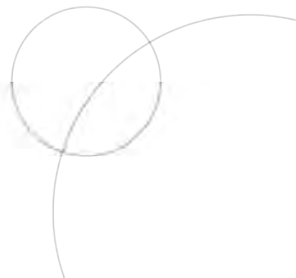






caring counts

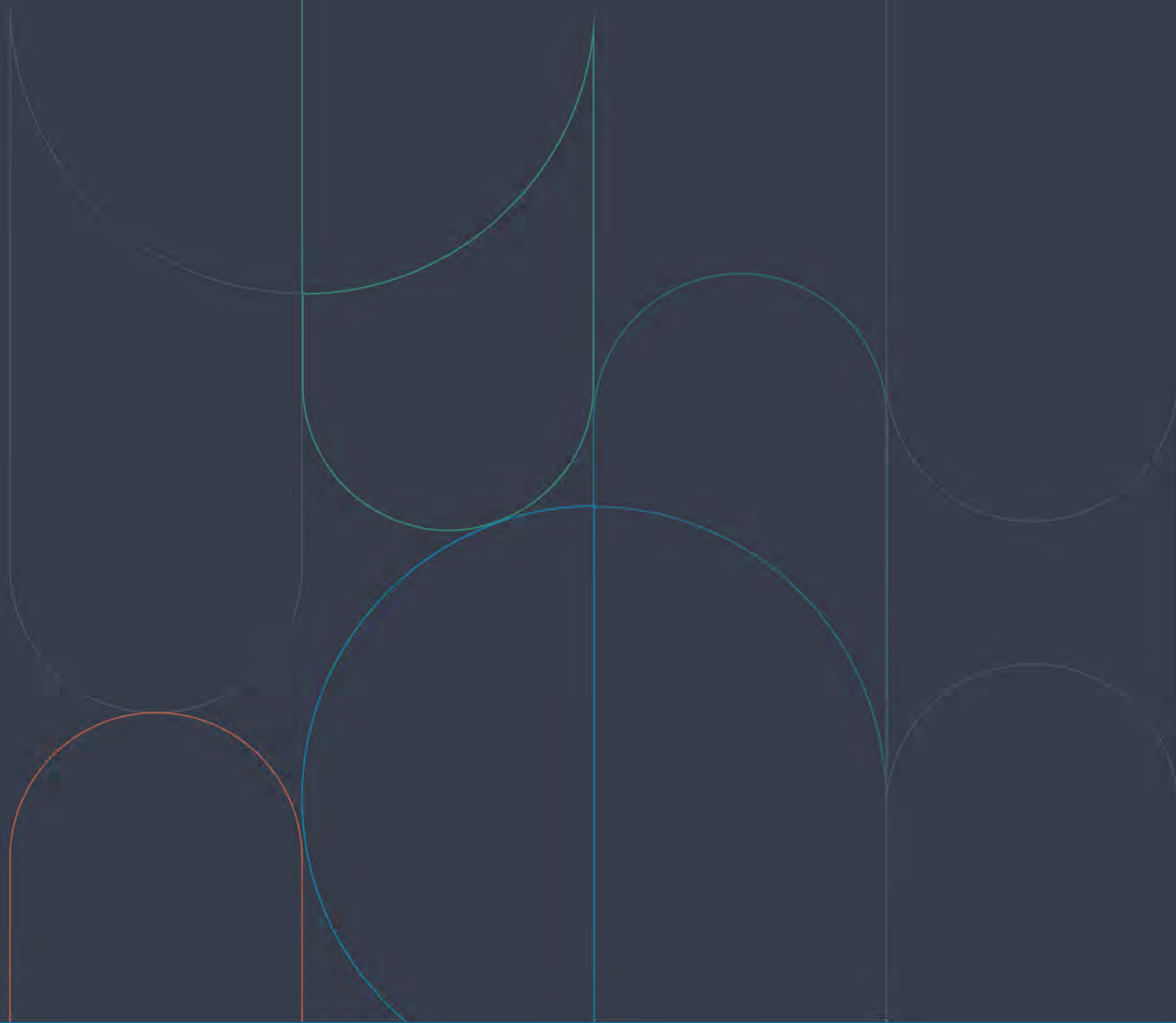






Nacelle fire

04



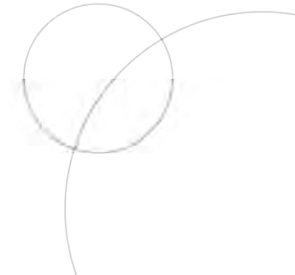










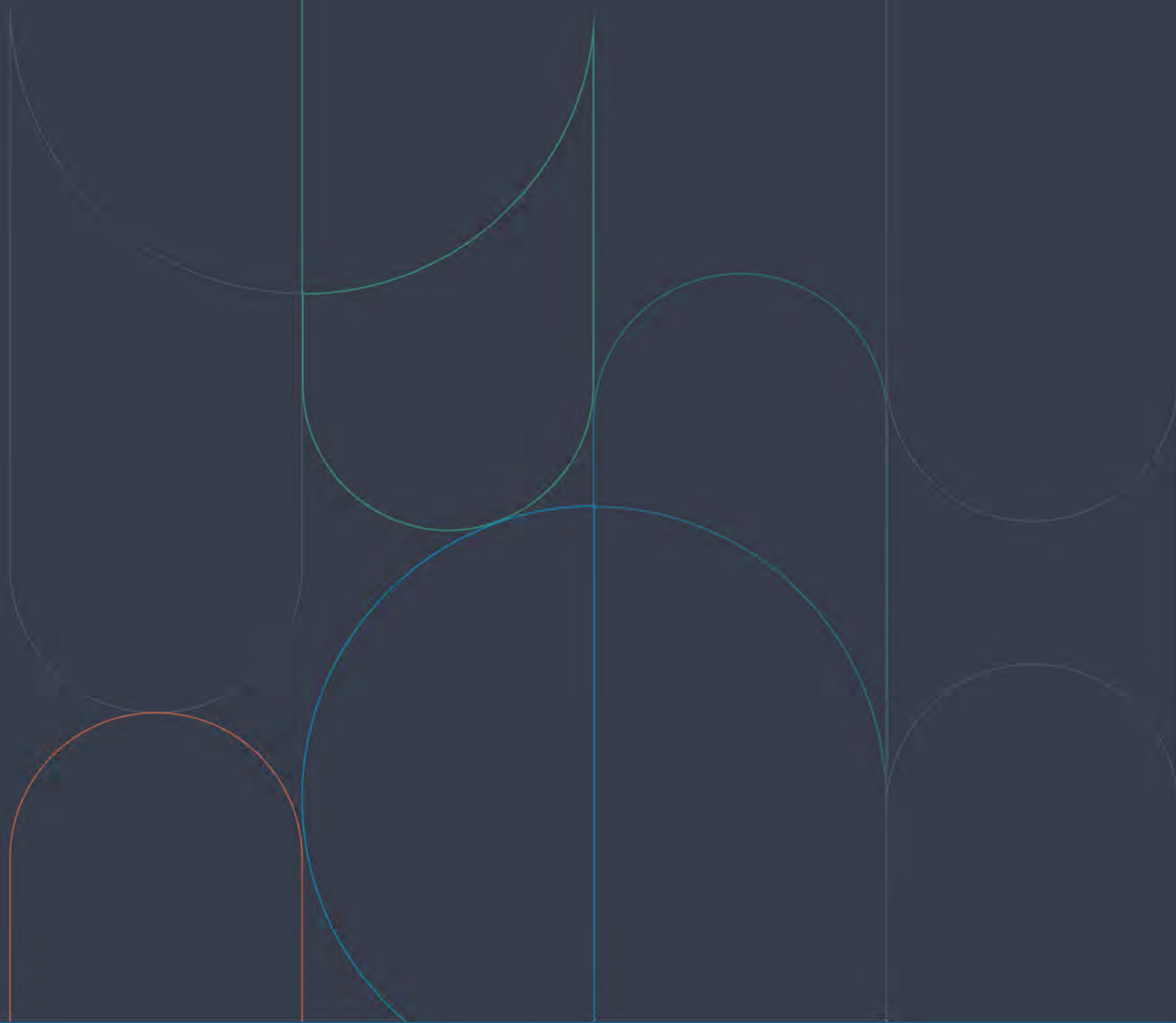




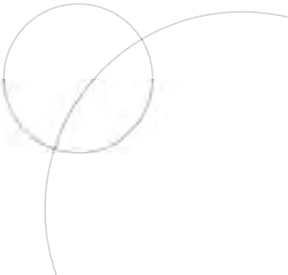


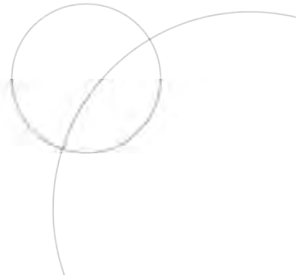
Generator failures

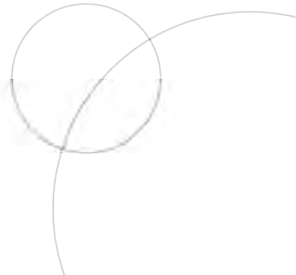
05





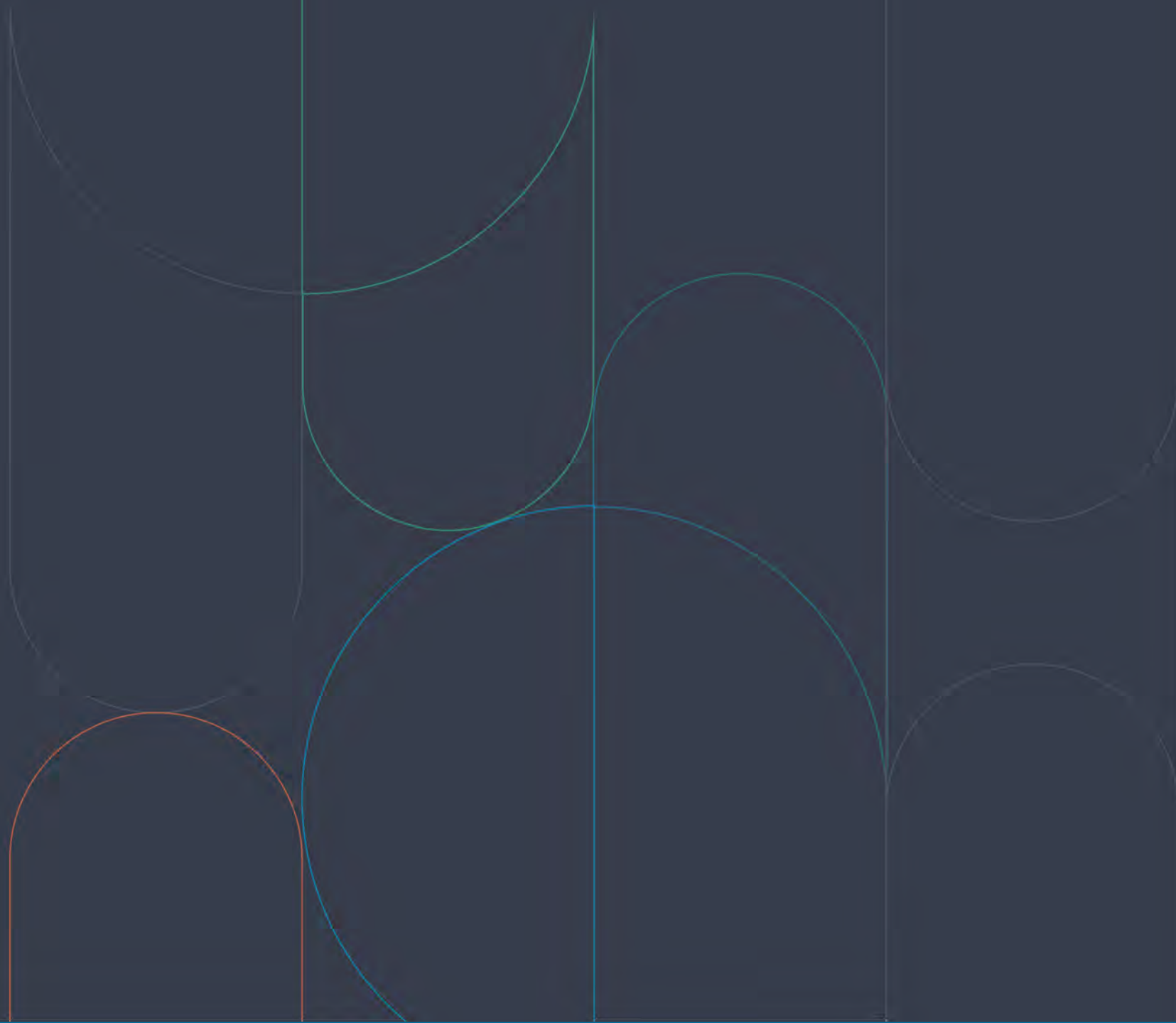


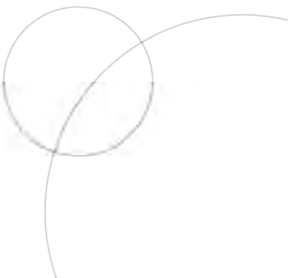
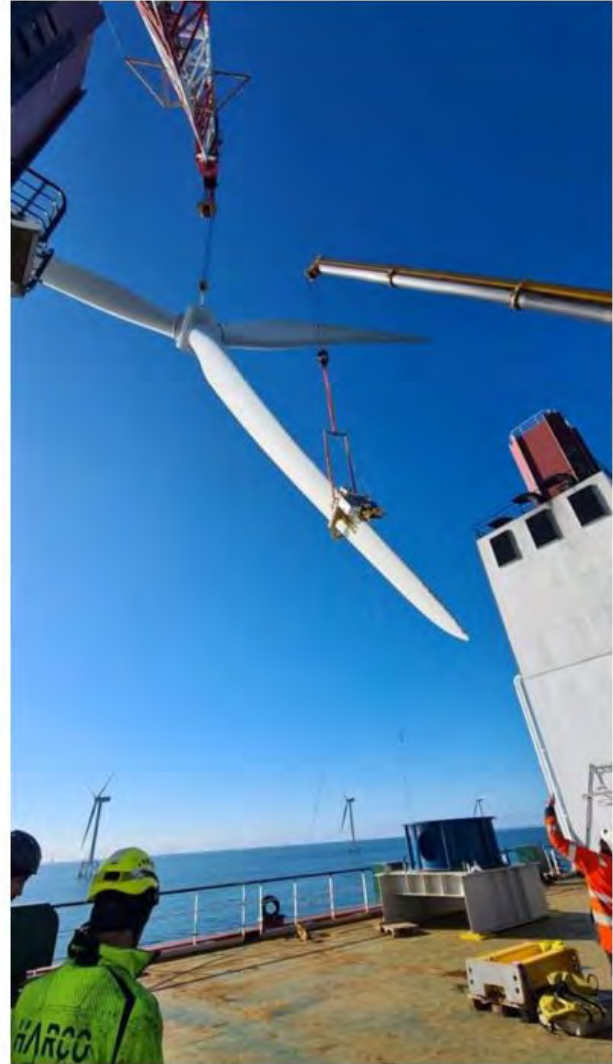




Handling failures

06











Questions?

07



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