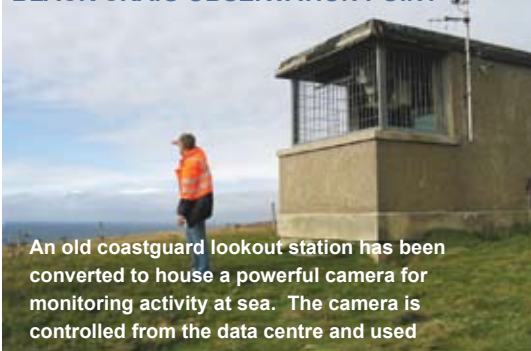


WAVE TEST SITE

EMEC



BLACK CRAIG OBSERVATION POINT



An old coastguard lookout station has been converted to house a powerful camera for monitoring activity at sea. The camera is controlled from the data centre and used

MET STATION

A purpose built weather station is located close to each test site. It is calibrated to national standards and provides developers with air temperature, windspeed and direction, humidity, rainfall and barometric pressure.



EMEC AT A GLANCE

- Full oceanic wave regime with test berths in 50 m water
- All berths UK grid-connected
- Realtime technology and environmental monitoring
- Nearby access to sheltered water and harbours
- Full office and data centre support
- Extensive local research and engineering support



PELAMIS ON SITE

BILLIA CROO WAVE ENERGY SITE



TEST BERTHS

Four 11 kV subsea cables extend to 50 m water depth, 1-2 km from shore at locations 0.5 km apart. Developers install their moorings, connect the cable and then their generating device.

VESSEL ACTIVITY

A range of different vessels (small and large) can be expected to be working in and around



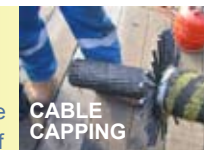
STROMNESS



WAVE RESOURCE

WAVERIDER BUOY

Waverider buoys are deployed to assess the wave characteristics of



CABLE CAPPING



CARDINAL BUOY

www.emec.org.uk

BILLIA CROO SUBSTATION

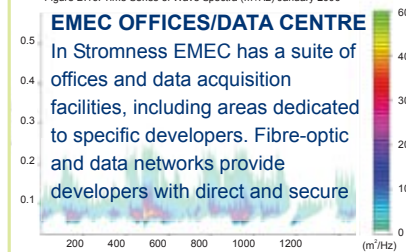


Carefully designed to minimise environmental impact, it contains main switchgear, back-up generator and communication room, controls for supply from each wave device, and connection to

TECHNICAL SPECIFICATIONS

- Coastal 11kV control and switching station
- Metered power output from test devices
- Comprehensive SCADA System (system control and data acquisition)
- Data transfer by fibre optic cables to allow remote access
- Operational CCTV monitoring of test site berths

Figure B.16: Time Series of Wave Spectra (m²/Hz) January 2006

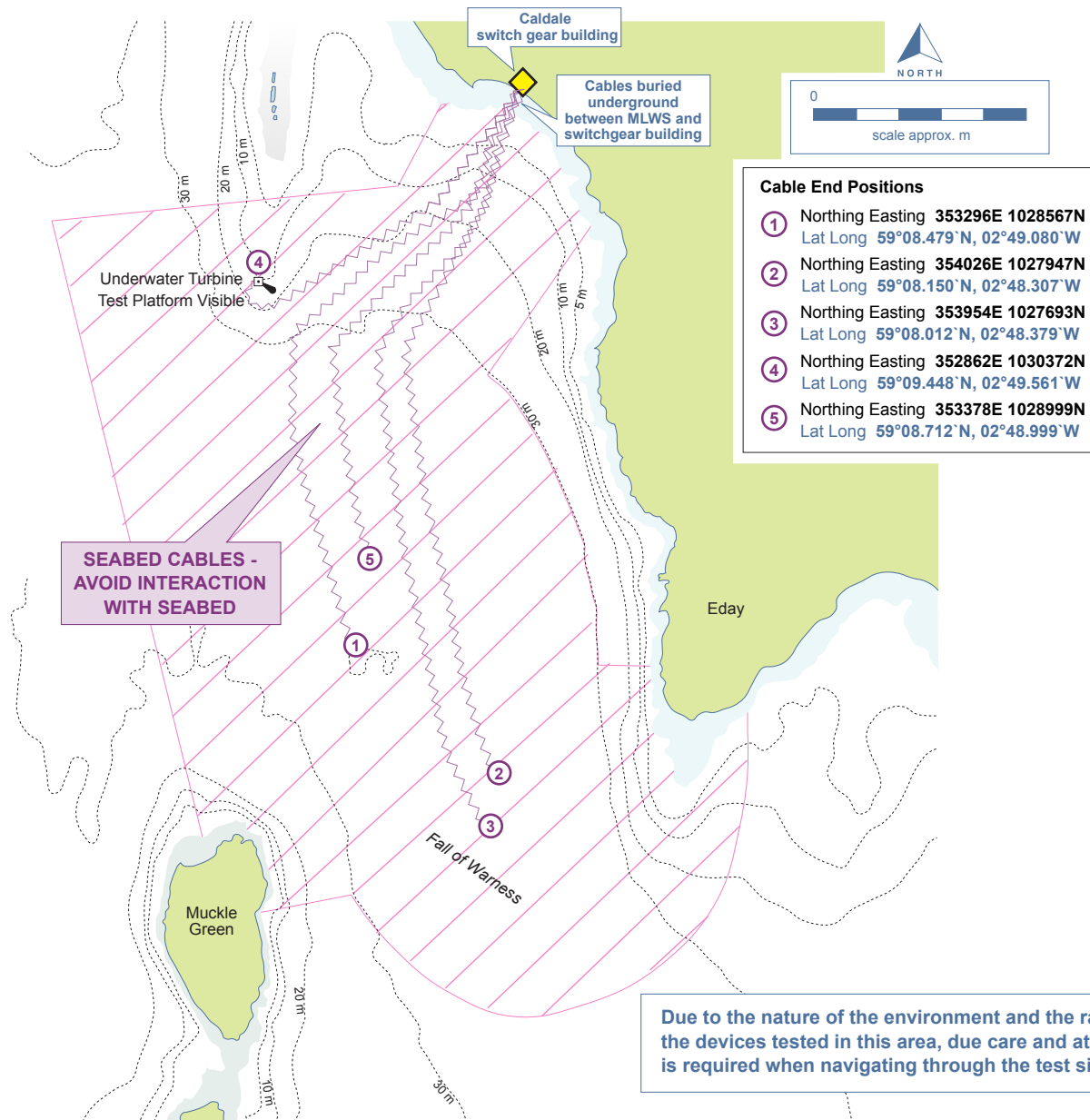


DIVING ACTIVITY

Divers can be expected to be working in the area.



TIDAL TEST SITE

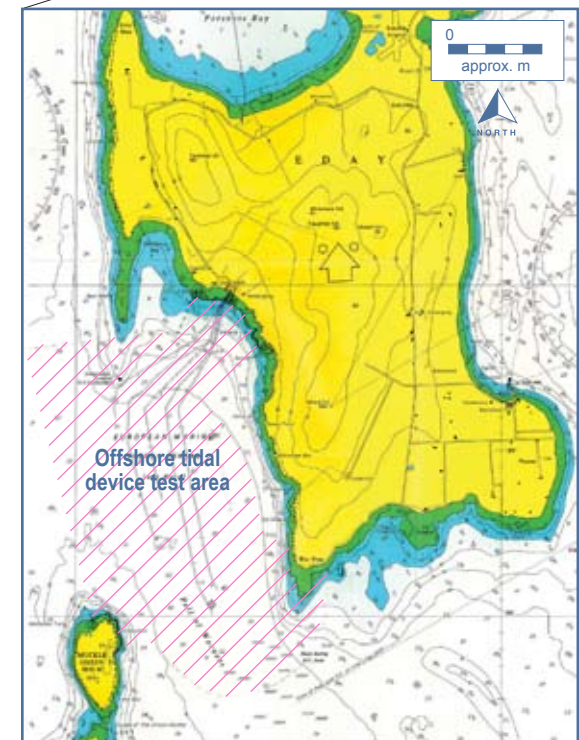
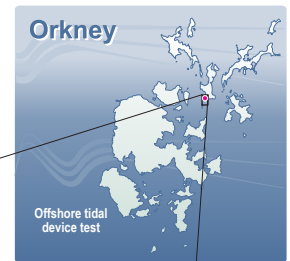


The European Marine Energy Centre Ltd
 Old Academy, Stromness,
 ORKNEY, KW16 3AW
 Tel: (01856) 852060
 Fax: (01856) 852068
 Email: info@emec.org.uk
 Web: www.emec.org.uk

24 hr contact - Tel: (01856)

Awareness chart note:

1. The shaded area highlights the test site for marine tidal energy converters. The position and depth of these vary.
2. Significant work will be displayed by the standard notice to mariner routes. (UKHO and www.orkneyharbours.com)
3. Devices will be marked in accordance with NLB and MCA recommendations.
4. Positions and number of buoys within the shaded area may vary.



Not to be used for navigation