## **NZFBI FIELD DAY**

## MANAPOURI HYDRO POWER STATION

### A once-in-a-lifetime opportunity

# The Power of Water: Electricity Generation and Supply



Manapouri, the largest hydro station in New Zealand, is located on the edge of Lake Manapouri's West Arm in Fiordland National Park, which has World Heritage status. The hydro station is located underground, with the station's generating units housed in a cavern excavated from rock 200 metres below the surface of Lake Manapouri.

The power station has seven 122 megawatt generating units, with an operating maximum station output of 800 megawatts. It generates enough electricity each year to supply the electricity needs of about 619,000 average New Zealand homes.

This field day, presented by Meridian Energy and sponsored by Real Journeys, will look at the process of generating electricity from Lake Manapouri and transmitting electricity to Tiwai Point through Transpower's national electricity grid. The field day will include an overview of the firefighting procedures and systems in place to preserve the power station in an emergency event, plus a visit to Deep Cove, the outlet of the power station's two tailrace tunnels.

Take advantage of this once-in-a-lifetime opportunity to visit one of the most remote yet nationally significant pieces of infrastructure in New Zealand!

#### What you'll learn

- Safety management for working with electricity generation equipment
- Fixed/ passive fire protection systems inspection
  - Gas flood systems
  - Foam and water firefighting supply systems
  - Vesda/smoke detection systems
  - Ventilation systems/safe havens
- Working at heights/vertical shafts hazard management
- Incident management procedures in remote/ isolated locations.



## Saturday 15 August

#### **Programme** (subject to change)

**0800** Registration at Te Anau Fire Station

0830 Depart from Te Anau Fire Station

0900 Depart from Pearl Harbour for West Arm

1000 Arrive at West Arm, site tour of powerhouse and

generation hall begins

1200 Lunch

1300 Depart for Deep Cove, site tour of tailrace tunnel outlet

1500 Arrive back at West Arm, depart for Pearl Harbour

1600 Arrive at Pearl Harbour

1630 Arrive at Te Anau Fire Station / Conclusion of Field Day

DRESS CODE: Level 1 Overalls, fully enclosed boots, safety glasses.

#### REGISTER ONLINE

There is a \$65.00 registration fee for this event—this includes bus/boat transfers from Te Anau Fire Station, lunch, and refreshments. Travel and accommodation costs must be met by attendees. This Field Day is limited to 40 participants. To register or for more information, visit www.ufba.org.nz/events/nzfbi\_field\_day\_manapouri



