Title | Manage implementation of power system dispatch instructions
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Level | 6
Credits | 10

Purpose | People credited with this unit standard are able to: review dispatch implementation plan; receive and review dispatch instructions; implement dispatch instructions; monitor, manage, and review implemented dispatch; and report implementation of power system dispatch instructions.

Classification | Electricity Supply > Electricity Supply - Power System Management

Available grade | Achieved

Recommended entry information | Unit 15575, Operate hydro-electric generating plant from enterprise control room.

Guidance Information

1. This unit standard is intended for, but not restricted to, workplace assessment. The range statements across the unit standard can be applied according to industry specific equipment, procedures, and processes.

2. Safety of personnel and plant must be a priority throughout the assessment. If the safety requirements are not met the assessment must stop.


4. The phrase in accordance with industry requirements is implicit in all outcomes and performance criteria in this unit standard.

5. Industry requirements include all asset owner requirements; manufacturers’ specifications; and enterprise requirements which cover the documented workplace policies, procedures, specifications, and business and quality management requirements relevant to the workplace in which assessment is carried out.
6 Practical workplace exercises or simulations should be used for training and assessment where possible.

7 *Dispatch implementation plan* refers to the internal plan produced by an enterprise for the dispatch of electricity generation.

### Outcomes and performance criteria

#### Outcome 1

Review dispatch implementation plan.

**Range** may include but is not limited to – generation implementation plan.

**Performance criteria**

1.1 Review of plan ensures generation distribution meets both short and long term enterprise requirements.

**Range** may include but is not limited to – active power, reactive power, spinning reserve, plant availability, transmission and plant constraints, consents, contracts.

1.2 Review of plan ensures fuel management meets both short and long term enterprise requirements.

**Range** may include but is not limited to – hydrology, steam, gas, coal, oil, diesel, wind.

#### Outcome 2

Receive and review dispatch instructions.

**Range** may include but is not limited to – active power, reactive power, voltage, frequency, frequency band, time error correction, reserve.

**Performance criteria**

2.1 Dispatch instructions are receipted.

**Range** may include but is not limited to – electronic, voice, paper, log.

2.2 Dispatch instructions are assessed against New Zealand wholesale electricity market enterprise offers.

**Range** may include but is not limited to – offer profiles – energy, reserve, frequency keeping.

2.3 Dispatch instructions are either accepted or queried with the dispatcher.
2.4 Dispatch instructions issued under emergency situations are accepted.

Range may include but is not limited to – grid emergency, system security situation, consents.

Outcome 3

Implement dispatch instructions.

Performance criteria

3.1 Dispatch instructions are implemented.

3.2 Electrical energy generation is allocated to generating stations and/or generators.

3.3 Spinning reserve is allocated to generating stations and/or generators.

3.4 Voltage support is allocated to generating stations and/or generators.

3.5 Frequency control and frequency keeping band is allocated to generating stations and/or generators in accordance with dispatch instruction.

3.6 Generating plant status is changed.

Outcome 4

Monitor, manage, and review implemented dispatch.

Performance criteria

4.1 Implemented dispatch is monitored to ensure dispatch requirements are met.

4.2 Changes from plan are identified and corrective actions initiated.

Range may include but is not limited to – New Zealand wholesale electricity market enterprise offers, pre Dispatch Schedule (PDS), offer, generation implementation plan.

Outcome 5

Report implementation of power system dispatch instructions.

Performance criteria

5.1 Reported information is completed and actioned.

5.2 Dispatch instruction information is recorded in the required format and filed within scheduled timeframe.
This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

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Consent and Moderation Requirements (CMR) reference 0120

This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.