Pre-Dispatch Sensitivities

March 2021

NER 3.13.4(h)

Important notice

PURPOSE

The Australian Energy Market Operator (AEMO) publishes this Pre-Dispatch Sensitivities document to define the demand scenarios used in pre-dispatch in the NEM as at the date of publication.

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VERSION CONTROL

Version	Release date	Changes
7.0	31/03/2021	Addition of 5MPD scenarios
6.1	18/03/2014	Correction of Victorian offsets in PD scenarios 25-28
6.0	16/02/2012	Removal of Snowy Region scenarios

1. Introduction

Pre-dispatch sensitivities – also known as pre-dispatch scenarios – predict the changes to pre-dispatch prices and interconnector flows after applying pre-defined offsets to the demand forecasts used in the base case.

Under clause 3.13.4(h) of the National Electricity Rules, AEMO is required to publish the expected sensitivity of forecast 30-minute prices to changes in forecast load or generating unit availability.[1] Although it is not a Rules requirement, AEMO will publish similar sensitivities for five-minute pre-dispatch (5MPD) from the start of five-minute settlement on 1 October 2021.

AEMO worked with industry reference groups to develop the sets of scenarios to apply to the base case of 30-minute pre-dispatch (PD) and 5MPD. This document specifies the sensitivities that are used in both kinds of pre-dispatch.

The scenarios used in PD plus the resulting price and interconnector flow forecasts are published in the MMS Data Model in the following tables:

- – PREDISPATCHSCENARIODEMAND
- – PREDISPATCHPRICESENSITIVITIES
- – PREDISPATCHINTERSENSITIVITIES

The scenarios used in 5MPD plus the resulting price and interconnector flow forecasts will be published in the MMS Data Model in the following tables from the start of five-minute settlement on 1 October 2021:

- – P5MIN_SCENARIODEMAND
- – P5MIN_PRICESENSITIVITIES
- – P5MIN_INTERSENSITIVITIES

AEMO also publishes the pre-dispatch sensitivity forecasts of prices and interconnector flows on the AEMO website.[2]

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[1] Positive changes in forecast load are equivalent to negative changes in generator availability.

[2] http://www.nemweb.com.au/Reports/Current/

2. Pre-Dispatch Sensitivities

The following table lists the regional demand offsets (in MW) used in each PD scenario. Each row represents a scenario, identified by a unique scenario ID in the first cell of the row. The numbers in the remaining cells are the pre-defined offsets applied to the base case demand forecasts for each region (NSW1, QLD1, SA1, TAS1, VIC1) under that scenario. A blank cell indicates no offset.

Please note there are no Scenarios 21-24. These scenario IDs were previously associated with the SNOWY1 region, which was abolished on 1 July 2008.

Table 1: PD Sensitivities

Scenario ID	Region ID				
	NSW1	QLD1	SA1	TAS1	VIC1
1	+100				
2	-100				
3	+200				
4	-200				
5	+500				
6	-500				
7	+1000				
8					+100
9					-100
10					+200
11					-200
12					+500
13					-500
14					+1000
15			+50		
16			-50		
17			+100		
18			-100		
19			+200		
20			-200		
25	+200	+100	+50		+100
26	-200	-100	-50		-100
27	+400	+200	+100		+200
28	-400	-200	-100		-200
29		+100			
30		-100			
31		+200			
32		-200			
33		+500			
34		-500			
35		+1000			
36				+50	
37				-50	
38				+100	
39				-100	

Scenario ID	Region ID				
	NSW1	QLD1	SA1	TAS1	VIC1
40				+150	
41				-150	
42				+300	
43			+500		

3. 5MPD Sensitivities

The following table lists the regional demand offsets (in MW) used in each 5MPD scenario. Each row represents a scenario, identified by a unique scenario ID in the first cell of the row. The numbers in the remaining cells are the pre-defined offsets applied to the base case demand forecasts for each region (NSW1, QLD1, SA1, TAS1, VIC1) under that scenario. A blank cell indicates no offset.

Table 2: 5MPD Sensitivities

Scenario ID	Region ID				
	NSW1	QLD1	SA1	TAS1	VIC1
1	+200				
2	-200				
3	+350				
4					+150
5					-150
6					+300
7			+100		
8			-100		
9			+200		
10		+150			
11		-150			
12		+300			
13				+50	
14				-50	
15				+100	