

# Attachment 13.1B Updated Core Energy Demand Forecast Report

Response to AER Draft Decision

January 2023





# Updated Gas Demand Forecast

Multinet Access Arrangement

Financial Years ending 30 June 2024-2028

January 2023



# 1. Introduction

This report has been prepared by Core Energy & Resources Pty Ltd ("**CORE**") for the purpose of providing Multinet with an Updated independent forecast of gas customers and gas demand for the Multinet (or "MGN") distribution network, for the five-year (Financial Year) Review Period from 1 July 2023 to 30 June 2028 ("**Review Period**").

This Update has been undertaken following release of a Draft Decision by the Australian Energy Regulator ("AER").

The AER's Draft Decision report included the following paragraphs:

"12.1 Draft decision

Our draft decision is to accept MGN's proposed demand forecasts for the 2023–28 period. We are satisfied that MGN's proposed demand forecasts, as applied by its consultant CORE Energy & Resources (CORE), comply with rule 74(2) of the National Gas Rules (NGR).

12.4.1 Multinet's forecast methodology and assumptions

...Notwithstanding this, we consider MGN should update its demand forecast in the revised proposal to take account of any material changes in assumptions or data between now and the revised proposal and should also update the forecast to take account of AEMO's 2023 GSOO.

Accordingly, Multinet has engaged CORE to update its independent forecast in accordance with the AER's request, while noting that that the AEMO GSOO has not been publicly released at the date of this report.

We acknowledge that this Update report, will form part of the Multinet Access Arrangement ("**AA**") Proposal submission to the Australian Energy Regulator ("**AER**"). This report should be read in conjunction with the Revised Gas Demand Model (Confidential and Not for Public Disclosure).

CORE has taken all reasonable steps to ensure this report, and the approach to deriving the forecasts referred to within this report, comply with Part 9, Division 2 of the National Gas Rules ("**NGRs**").

# 2. Summary

Following a review of Updated Multinet and HIA data, CORE considers that the following Updated Forecast is the best estimate of Residential and Commercial demand for the Review Period, under these circumstances. An update is considered not to be required for the Multinet Industrial tariff class, based on materiality.

The following table provides a summary of the Revised (September) Forecast and the Updated (January) Forecast for Multinet.

Revised as submitted to AER September 2022	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2023-24 to 2027-28
Residential Demand	37,541,129	37,371,761	35,920,646	34,415,781	32,728,645	30,714,659	28,678,019	162,457,750
Commercial Demand	5,582,059	5,711,382	5,650,736	5,423,553	5,358,021	5,293,281	5,229,324	26,954,916
Total R&C	43,123,188	43,083,143	41,571,382	39,839,335	38,086,667	36,007,941	33,907,342	189,412,666
Updated January 2023	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2023-24 to 2027-28
Residential Demand	36,063,421	35,532,775	34,114,874	32,672,225	31,022,697	29,066,123	27,116,434	153,992,354
Commercial Demand	5,297,558	5,409,268	5,350,622	5,144,043	5,090,033	5,021,223	4,953,566	25,559,487
Total R&C	41,360,979	40,942,042	39,465,496	37,816,268	36,112,730	34,087,346	32,070,000	179,551,841

Further detail of the basis for this Updated Forecast is provided below and in the accompanying Demand Model.

# 3. Supporting Analysis

#### 3.1. Residential Demand

CORE has considered the following updated information to derive its Updated Revised Forecast of residential demand:

- Updated Multinet sourced connections data for the 2022 fiscal year.
- Updated Multinet sourced consumption data for the 2022 fiscal year.
- Updated HIA-based new dwelling connections forecasts.

## 3.1.1. Update

#### 3.1.1.1 Multinet Connections data:

Based on updated 2021-22 actual Multinet data, the following table shows that there is a minor difference between the 2021-22 Revised Forecast Residential connections and the 2021-22 Actual data.

Revised Residential as submitted to AER	2021-22
Closing connections	702,346
Average connections	701,807
Updated January 2023	2021-22
Closing connections	702,253
Average connections	701,760

However, for completeness the Multinet Demand Model has been updated.

Based on updated November 2022 HIA data, the following table shows that there is an increase in forecast new residential connections of 13,781 across Victoria, over the 2023-4 to 2027-8 period.

HIA Data	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Total 2023-24 to 2027-28
Revised Forecast HIA Data	57,499	54,513	45,862	39,316	37,166	37,311	37,239	196,893
Updated Revised Forecast HIA Data	57,497	54,523	48,770	43,308	37,866	38,844	41,886	210,674
Net Movement	-2	10	2,908	3,992	700	1,533	4,647	13,781

By applying a methodology which is consistent with the approach summarised in the Revised Forecast report, the forecast Victorian increase results in an updated revised forecast increase of 1,913 new connections for the Multinet network, as shown below.

#### **Regression Data**

Multiple R	0.9764754
R Square	0.9535043
Adjusted R Square	0.9302564
Significance F	0.0235246
X variable P value	0.0235246
Coefficient X Variable	0.1388173
Intercept	-2350.6546

Derivation of Multinet Connections - January Updat	te 2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Sum
Updated Multinet Connections	5,218	4,419	3,661	2,906	3,042	3,464	17,492
Movement	-93	404	554	97	213	645	1,913
Cumulative movement		311	865	962	1,175	1,820	

Taking the above updates into consideration, the following table presents a summary of the Revised Forecast connections (September) and the Updated Forecast connections (January).

Revised Residential as submitted to AER	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Closing connections	702,346	700,084	691,871	682,483	667,062	648,071	625,353
Average connections	701,807	701,215	695,977	687,177	674,772	657,566	636,712
Updated January 2023	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Closing connections	702,253	699,991	692,182	683,347	668,024	649,246	627,173
Average connections	701,760	701,122	696,086	687,765	675,686	658,635	638,210

3.1.1.2 Multinet Demand/Connection data:

Based on updated 2021-22 actual Multinet data, the following table shows that the 2021-22 actual weather normalised demand/connection was lower than the 2021-22 Revised Forecast.

CORE has Updated the Demand Model for the Actual 2022 result vs the estimate which was included in the Revised (September) Model as shown below.

Revised as submitted to AER	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
D/C	53.49	53.30	51.61	50.08	48.50	46.71	45.04
Updated January 2023	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Updated D/C	51.39	50.68	49.01	47.50	45.91	44.13	42.49

#### 3.2. Commercial Demand

CORE has considered the following updated information to derive its Updated Revised Forecast of commercial demand:

- Updated Multinet sourced connections data for the 2022 fiscal year.
- Updated Multinet sourced consumption data for the 2022 fiscal year.

### 3.2.1. Updated data

3.2.1.1 Multinet Connections data:

Based on updated 2021-22 actual data, the following table shows that there is a minor difference between the 2021-22 Revised Forecast commercial connections and the 2021-22 Actual data.

Revised Commercial as subm	2021-22	
Closing connections		16,116
Average connections		16,133
Updated January 2023		2021-22
Closing connections	16,150	16,054
Average connections		16,102

Accordingly, for completeness the Multinet Demand Model has been updated.

Revised Commercial as submitted to AER	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Closing connections	16,116	15,240	14,367	14,337	14,307	14,277	14,247
Average connections	16,133	15,678	14,804	14,352	14,322	14,292	14,262
Updated January 2023	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Closing connections 16,150	16,054	15,178	14,305	14,275	14,245	14,215	14,185
Average connections	16,102	15,616	14,742	14,290	14,260	14,230	14,200

3.2.1.2 Multinet Demand/Connection data:

Based on updated 2021-22 actual Multinet data, the following table shows that the 2021-22 actual weather normalised demand/connection was marginally higher than the 2021-22 Revised Forecast.

Revised Commercial as submitted to AER	2021-22
D/C	346.00
Updated January 2023	2021-22
D/C	329.00

Accordingly, CORE has Updated the Demand Model for the Actual 2022 result vs the estimate which was included in the Revised (September) Model as shown below.

The following table presents a summary of the Revised Forecast connections (September) and the Updated Forecast connections (January).

Revised Commercial as submitted to AER	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
D/C	346.00	364.29	381.71	377.90	374.12	370.38	366.67
Updated January 2023	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
D/C	329.00	346.39	362.96	359.97	356.94	352.86	348.84