

2023-2024

NEM Connection Scorecard - Feb 2024

Financial year to date (FYTD) summary of connections to the National Electricity Market (NEM).

Notes:

- (1) Application stage: assess the performance of the plant "as designed".
- (2) "Approved Applications" have achieved NSP and AEMO approval of Generator Performance Standards (5.3.4A letter).
- (3) Pre-Registration stage: execute connection agreement, construct plant, network interface and prepare registration application. Completion milestone is when registration application is submitted.
- (4) Registration stage: assess registration application, demonstrating performance of "as built" plant
- (5) "Approved Registrations" have received NEM registration approval from AEMO.
- (6) Commissioning to Full Output stage: assess physical interaction of the plant at successive hold points to confirm alignment between modelled and tested performance.
- (7) 'Full Output Achieved' means plant has commenced operating at maximum rated capacity in the NEM.
- (8) Alterations increasing/decreasing capacity, required to notify AEMO Registrations team.
- (9) Technology type groups are as stated. Solar+(B) are projects with solar generation and battery. Other Hybrid includes projects combining multiple variable renewable generation types (e.g. Wind & Solar). Pumped hydro is included in Hydro. Other includes all other synchronous technologies beyond hydro.
- (10) Typical average duration shows complete project stages within the past 12 months, and excludes projects which experienced atypical delays (e.g. construction issues or funding uncertainty), in order to provide an indicative stage duration.
- Key This value is:

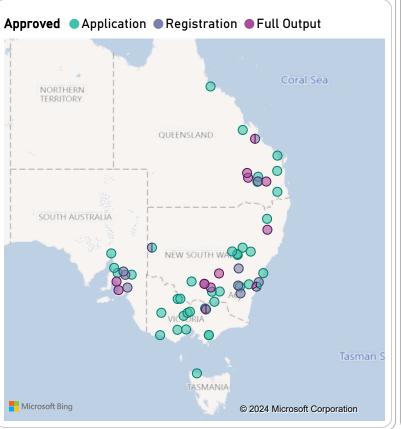
 ▼ Lower than at the same time
- Higher than at the same time last year.

Feb 2024 Summary Approved Applications⁽²⁾

During February, 2 projects totalling 0.14 gigawatts (GW) received application approval and moved into the pre-registration stage, bringing the FYTD total to 40 projects (7.6 GW).

No projects completed registration, so the FYTD total remained at 12 projects (1.7 GW).

Two projects (0.16 GW) commenced operating at full output in February, increasing the FYTD total to 14 projects (1.7 GW).



Two projects: 1 battery (100 MW) and 1 solar farm (43 MW)

No registrations in February

Approved Registrations(5)

Two projects reached full output: Bomaderry Cogeneration Plant (54 MW) and Glenrowan Solar Farm (102 MW) which reached full output in 2 mths

Full Output Achieved(7)

Total Projects (FYTD) and Project Duration (Typical average duration) (10)

40 A

9.6
Typical avg. duration (months)

12 w

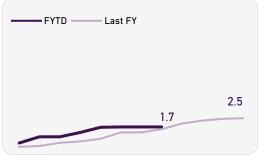
5.6
Typical avg. duration (months)

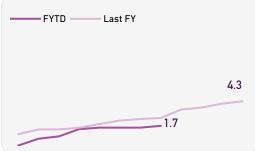
14 Vo. projects FYTD

5.2
Typical avg. duration (months)

Approved FYTD GW by Stage in relation to last FY

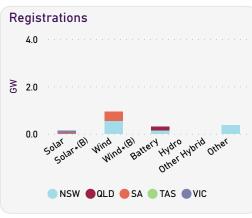


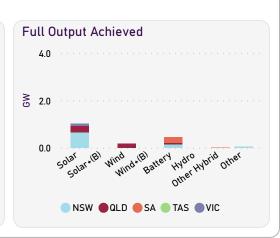




Approved FYTD GW by Technology Type⁽⁹⁾ and Stage







Connection projects underway - monthly changes

Learn more: Connection Scorecard







FY 2023-2024

Month ending

Feb 2024

NEM **Connection Scorecard In-progress**

Snapshot of current projects (in-progress) in each stage as of Feb 2024

Notes

(1) Enquiries are potential applications for connection to the NEM. Project options and feasibility are assessed.

(2) Application stage: assess the performance of the plant "as designed".

20

10

(3) Pre-Registration stage: execute connection agreement, construct plant, network interface and prepare registration application. Completion milestone is when registration application is

(4) Registration stage: assess registration application, demonstrating performance of "as

(5) Commissioning to Full Output stage: assess physical interaction of the plant at successive hold points to confirm alignment between modelled and tested performance.

(6) Alterations /Upgrades for plant already connected to the NEM e.g. setting changes or new plant components.

(7) Alterations increasing/decreasing capacity, required to notify AEMO Registrations team.

(8) Staged commissioning approach - Proponent has planned commissioning in stages due to staged construction or to manage their resources.

- Higher than at the same time last year.
- Lower than at the same time last year.

Fig. 1 Connection projects underway - monthly changes



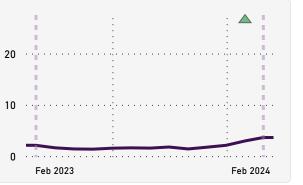
Signifies the number of projects moving from one stage to the next this month. * The conversion rate is an indicative MW % that will proceed through this stage based on historical data.

Fig. 2 - Connection Volume (GW) Trend Analysis by Stage



GW capacity in this stage is currently 83% more than 12 GW capacity in this stage is currently 75% more than 12 months ago

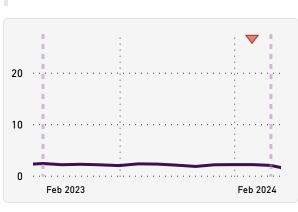
Registration GW per month



GW capacity in this stage is currently 72% more than 12

Commissioning to full-output GW per month

20



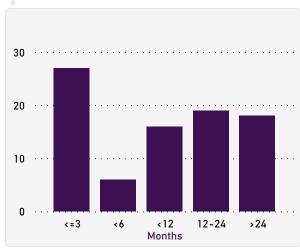
GW capacity in this stage is currently 16% less than 12

Fig. 3 - Current number of projects in each Stage by Duration

Application Extended duration (factors outside Connections Process) 20 10 <12 12-24 >24 <=3 ٠6 Months

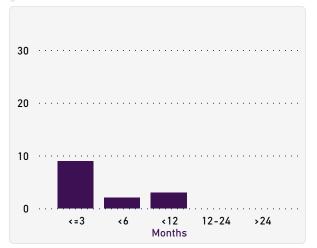
9% of projects have extended duration due to factors outside the connections process, with the remaining 13% of projects in this stage for >12 months experiencing complex design, design changes and higher need for resubmissions.

Pre-Registration



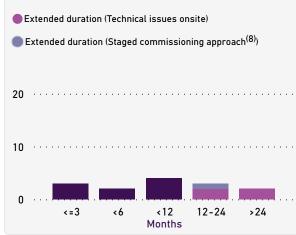
43% of projects have been in this stage for more than 12 months.

Registration



0% of projects have been in this stage for more than 12 months.

Commissioning to full-output



29% of projects have extended duration due to technical issues onsite 7% are due to staged commissioning approach.



FY 2023-2024

Month ending

Feb 2024

NEM Connection Scorecard

In-progress

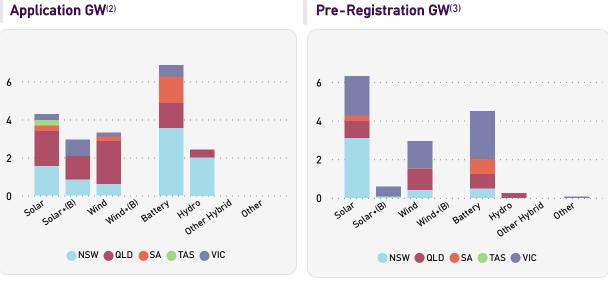
Snapshot of current projects (in-progress) in each stage as of Feb 2024

Notes

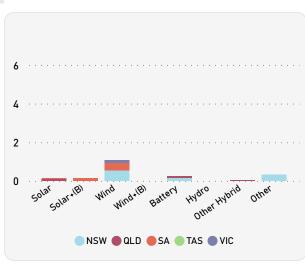
(1) Technology type groups are as stated. Solar+(B) are projects with solar generation and battery. Other Hybrid includes projects combining multiple variable renewable generation types (e.g. Wind & Solar). Pumped hydro is included in Hydro. Other includes all other synchronous technologies beyond hydro.

- (2) Application stage: assess the performance of the plant "as designed".
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- (4) Registration stage: assess registration application, demonstrating performance of "as built" plant.
- (5) Commissioning to Full Output stage: assess physical interaction of the plant at successive hold points to confirm alignment between modelled and tested performance.

Fig. 4 GW Volume in each Stage by Technology Type(1) and State

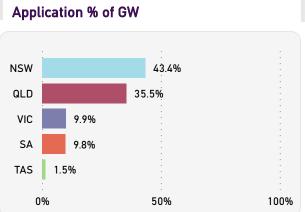


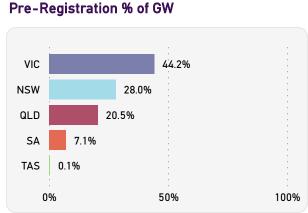


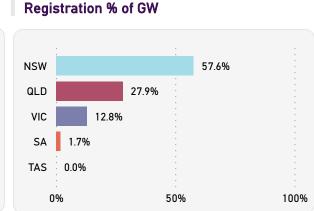


Commissioning to full-output GW(5)

Fig. 5 GW Volume percentage by State







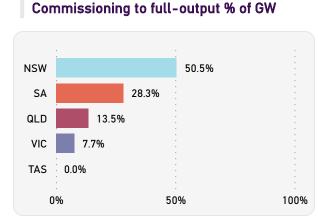
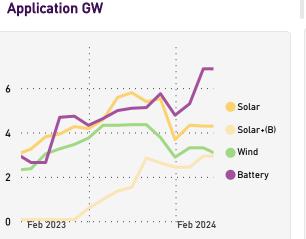
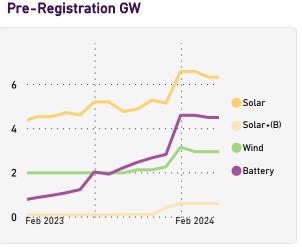
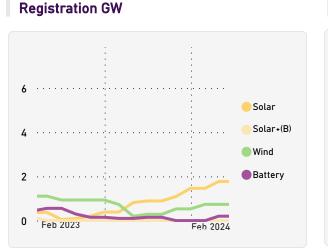
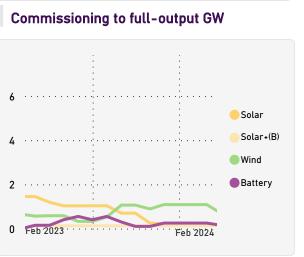


Fig. 6 GW Volume Trend Analysis by Renewable Technology











FY 2023-2024

Month ending

Feb 2024

NEM Connection **Scorecard Performance**

Completed milestones in AEMO Connections process, by Stage.

Notes:

- (1) Application stage assesses the performance of the plant as designed. Applications are approved when the 5.3.4A letter is issued.
- (2) Registration stage: assess registration application, demonstrating performance of "as built" plant. Approved Registrations" have received NEM registration approval from AEMO
- 3) 'Full Output Achieved' means plant has commenced operating at maximum rated capacity in the NEM.
- (4) Typical average duration shows complete project stages within the past 12 months, and excludes projects which experienced atypical delays (e.g. construction issues or funding uncertainty), in order to provide an indicative stage

Approved Applications(1)



Approved Registrations (2)



Full Output Achieved (3)

40 No. projects FYTD

7.6 **GW FYTD**

9.6 Typical avg. duration (months)

12 No. projects FYTD

1.7 **GW FYTD**

5.6 Typical avg. duration (months)

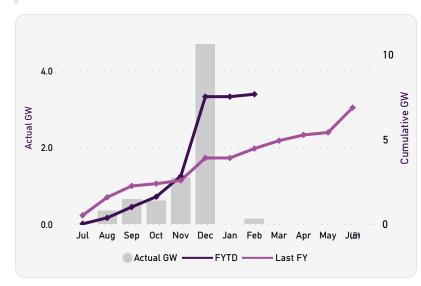
14 No. projects FYTD

1.7 **GW FYTD**

5.2 Typical avg. duration (months)

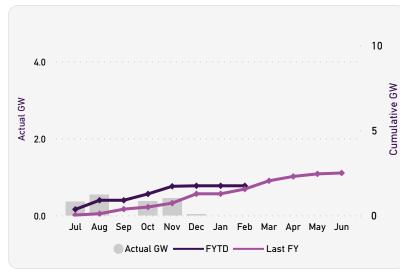
Fig. 7 Approved GW by Stage

Approved Application



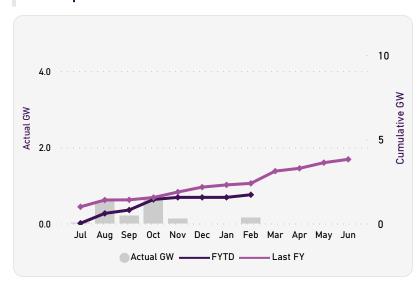
The latest cumulative GW capacity for Feb 2024 is 72% more than the same time last year

Approved Registration



The latest cumulative GW capacity for Feb 2024 is 13% more than the same time last year

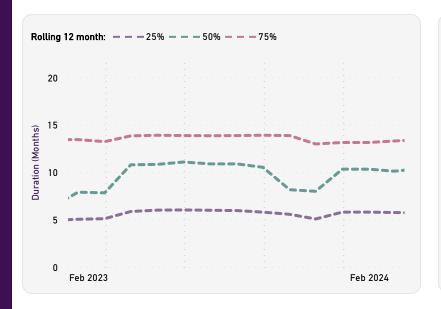
Full Output Achieved



The latest cumulative GW capacity for Feb 2024 is 28% less than the same time last year

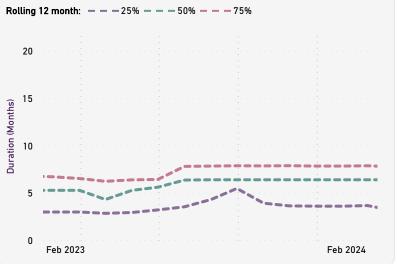
Fig. 8 Project Stage Duration (Months) Trend Analysis

Approved Application



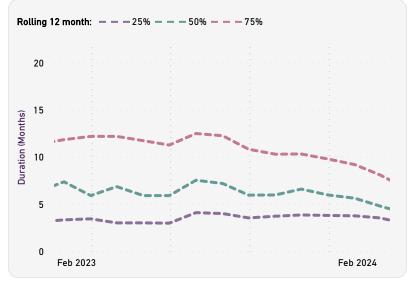
75% of the projects took 13.3 months or less to complete this stage. 25% of projects took 5.7 months or less to complete this stage.

Approved Registration



75% of the projects took 7.9 months or less to complete this stage. 25% of projects took 3.6 months or less to complete this stage.

Full Output Achieved



75% of the projects took 8.1 months or less to complete this stage. 25% of projects took 3.5 months or less to complete this stage.