

Adjustment event – BBI workflow description

This is a case study to illustrate the process of calculating BBI charges in response to an adjustment event for embedded plant.

The steps and actions are the same or similar regardless of customer size and whether embedded or directly connected. However, for embedded plant the process involves an EDB, complicating communications and distributor pricing.

• Path A: Direct Connect customer

- **Large** projects (> 50MW +) typically connect to the grid, where possible.
- Medium or small projects (<50MW or <25MW) might connect to the grid in some circumstances e.g. expansion of existing grid connected plant, geographically closer to the grid than a distribution network with sufficient capacity / reliability

• Path B: Embedded plant

1. Customer joins EDB queue, progresses to relevant stage

2. EDB submits indicative price request

- Note: this request may come via the connecting party directly or be identified by Transpower from System Operator (SO) or public information (e.g. energy news)

3. Customer interaction + prepare indicative price

- takes **10–30 hours** to calculate and complete assurance
- elapsed time of 20 working days

Side note 1: there can be an ongoing process with **multiple iterations over 2–3 years** as the project progresses with a **firm update** required when the project is **near FID** (Final Investment Decision).

Side note 2: Transpower adds each project to its 'tracker' and updates for information from the EDB customer, System Operator or other sources. Status of projects in the tracker are reviewed weekly.

4. **Asset is commissioned:** Transpower is notified by the **system operator** if the plant is generation.

Side note 3: there is **no SO notification** for **embedded offtake** so Transpower relies on notification by the EDB, customer or public information.

Side note 4: the issue with staged commissioning remains

5. **Transpower contacts EDB:** to notify of **liability for BBI** charges and to request final data for embedded plant to calculate BBI adjustment

Side note 5: this stage involves chasing customers who may ignore or provide incomplete information, protracting the process. If information is not provided, Transpower must estimate inputs to pricing calculations.

6. **Finalise calculation inputs:** once Transpower **receives complete information** or decides it cannot rely on the EDB to provide these and then produces its **use its own estimates**.
7. **Transpower performs calculations:** this must be "done and locked down" to manage sequencing of events

Subsidiary process:

- i. Identify BBI region through system analysis
 - ii. Identify equivalent customers
 - iii. Perform calculations for all Appendix A BBIs
 - iv. Define simple method region (identify which simple method BBIs are affected)
 - v. Decide what calculations are required
 - vi. Calculate BBI charge for generation
 - vii. Calculate BBI charge for offtake
 - viii. Consider each of the 21 BBIs for generation and load
 - ix. Model charges for each investment (done individually in Excel)
 - x. Determine BBI charge
 - xi. Apply transitional price cap test
8. **Perform quality assurance:** all calculations undergo quality assurance by a second technically expert staff member.
 9. **Finalise BBI price**
 10. **Provide price to EDB customer:** includes a summary of calculations (although most customers do not understand this)

Subsidiary process:

- i. Prepare washup calculations for affected existing customers:
 - a. each affected customer
 - b. each affected BBI asset
- ii. Update washup calculations after end of pricing year
- iii. Apply washups as rebates at next pricing round (2 years after the adjustment event)

iv. Elapsed time from initial request to completion of wash ups is from 3 to 5 years.

Simple Copilot generated visualisation

