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Application for authorisation of the proposed acquisition of Origin Energy Limited by Brookfield LP and MidOcean Energy

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Date 25 May 2023

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I, Jonathan Hammond, of Unit D1, 15-21 Doody St, Alexandria NSW 2015, Executive General Manager at Intellihub Australia Pty Ltd say on oath:

- 1 I am the Executive General Manager Strategy & Corporate Development at Intellihub Australia Pty Ltd (**Intellihub**) and I am authorised to make this statement on Intellihub's behalf.
- 2 Intellihub is a utility services company that provides smart metering services and data solutions across the Australian and New Zealand electricity, gas and water networks. Intellihub is held in a 50:50 joint venture by Brookfield Infrastructure Fund IV (**BIF IV**) and Pacific Equity Partners (**PEP**).
- 3 I make this statement from my own knowledge, except where otherwise stated. Where I make a statement based on a matter of information or belief, I state the source of that information or belief and believe it to be true.

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4 Annexed to this statement is a tabbed bundle of documents marked 'JH-1' to 'JH-7'. Certain annexures, being JH-1 and JH-7, are confidential to Intellihub and, in some instances, to third parties. In this statement, I refer to each document by reference to the relevant annexure number.

5 Intellihub claims confidentiality over:

- (a) the parts of this statement highlighted in **Confidential to Intellihub**; and
- (b) the confidential annexures to this statement, marked Confidential Annexure 'JH-1' and Confidential Annexure 'JH-7'.

1 Professional Qualifications and experience

6 I hold a Bachelor of Engineering (1st Class Honours) (2011) and a Bachelor of Commerce (Accounting) (2011) from Sydney University.

7 I commenced my role as Executive General Manager Strategy & Corporate Development at Intellihub in 2018. In this role, I am responsible for the Intellihub group's overall strategy in both Australia and New Zealand. I have been integrally involved in Intellihub's expansion into water and gas metering and led Intellihub's growth in solar, battery and electric vehicle services. I am also responsible for Intellihub's mergers and acquisition function.

8 Prior to joining Intellihub I held the following roles in the strategy and energy sectors:

- (a) Senior Manager, Strategy and Finance at Acumen Metering from 2017-2018. I was part of the Acumen leadership team that managed the carveout and divestment of Acumen from Origin Energy in 2018. I was responsible for strategy, finance and commercial related matters as the Acumen business prepared for the commencement of the Power of Choice framework in late 2017.
- (b) Various strategy and commercial roles at Origin Energy from 2015-2017, mainly related to Origin's solar PV and home battery installation business.
- (c) Strategy consultant at Port Jackson Partners from 2014-2015. I worked across a number of industries, providing advice to CEOs, Boards and senior managers to help set corporate direction, define business strategies and develop their organisations.
- (d) Strategy consultant at PwC from 2012-2013. I worked on a range of consulting projects, mainly related to the sustainability, energy transition and risk areas.

2 Intellihub

9 As the Executive General Manager Strategy & Corporate Development at Intellihub, I have knowledge and oversight of the services that Intellihub offers to consumers in Australia, as well as the nature of Intellihub's customers, which I summarise in the sections below.

2.1 Services offered by Intellihub

10 Intellihub's key offering is in respect of electricity smart metering. Intellihub offers the following services to energy retail customers across the National Electricity Market (**NEM**):

- (a) Metering coordinator services, which involve the coordination and provision of metering services at a connection point (**Metering Coordinator**);
- (b) Metering provider services, which involve the programming, installation, inspection, and maintenance of smart meters at the connection point (**Metering Provider**); and
- (c) Metering data provider services, which involve the collection, processing, and delivery of metering data from installed smart meters (**Metering Data Provider**).

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- 11 The services that Intellihub provides to energy retail customers across the NEM vary depending on the customer segment that the energy retailer is servicing. I have included diagrams in the paragraphs that follow which provide a visual depiction of the market participants in respect of mass market customers, commercial and industrial (**C&I**) customers and embedded network customers.
- 12 Intellihub has only a very limited gas and water offering currently (given that the gas and water sectors do not have contestable smart metering). Intellihub's gas and water offerings involve developing products for use by gas and water networks (i.e., as a potential input supplier) rather than as a metering service. This is a small part of Intellihub's business.
- 13 In addition to its smart meter offering, Intellihub also offers various ancillary products and services including:
- (a) **Solar management:** Intellihub offers near real-time solar generation and household consumption data delivery services.
 - (b) **Serviced hot water:** Intellihub offers data delivery services on hot water in embedded networks for developers, strata managers and owner corporations.
 - (c) **Distributed Energy Resources (DER) devices:** Intellihub offers a connectivity bridge between the smart meter and a range of appliances behind the meter. This currently allows for near real time data delivery services and dynamic control services for electric hot water systems and/or solar systems where connected to the smart meter.
- 14 Intellihub also has various projects currently under development, including for example:
- (a) **Batteries:** Intellihub is developing systems that can optimise fleets of batteries to reduce costs for retailers and increase cost benefits for households.
 - (b) **Electric vehicle charging:** Intellihub is developing a service to provide managed monitoring and control of electric vehicle (**EV**) charging.
 - (c) **Virtual Power Plants:** a Virtual Power Plant (**VPP**) is a network of homes or small businesses whose solar panels, batteries, pool pumps, EVs and other 'behind the meter' energy assets are controlled by a software platform that reduces electricity demand in coordinated ways to avert shortages and blackouts. Intellihub is developing a DER register and connectivity service that enables VPP services to communicate with distributed assets.
 - (d) **Home insights (load disaggregation):** Intellihub is developing energy insight algorithms that have the ability to offer consumers a personalised breakdown of energy use by appliance.

2.2 Intellihub's customers

- 15 Intellihub's smart meter offering accounts for approximately **Confidential to Intellihub: a significant majority** of its revenue, with its ancillary products and services accounting for approximately **Confidential to Intellihub: a small minority**.
- 16 In respect of Intellihub's smart meter offering, Intellihub primarily supplies smart meters to electricity retailers servicing three main customer categories across the NEM:
- (a) **mass market customers** (i.e., residential customers and small-to-medium-sized enterprises): This accounts for approximately **Confidential to Intellihub: 60 - 80%** of Intellihub's smart meter revenue, and is its primary revenue stream. Given the importance of this customer segment to Intellihub's business, the majority of the matters that I describe in the sections below relate to the electricity mass market customer segment. Intellihub does not supply energy retailers servicing the mass market in Victoria. Mass

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market metering in Victoria is the responsibility of the Distributed Network Service Provider.

- (b) **embedded networks** (ie, high-density residential buildings, retail, aged care communities and corporate parks): This accounts for approximately **Confidential to Intellihub: 10 - 20%** of Intellihub's smart meter revenue, and is a much smaller income stream for Intellihub. Almost all of Intellihub's revenue from embedded networks is derived from servicing **Confidential to Intellihub**. I address this in more detail in paragraphs 77-78 below.
- (c) **Commercial and industrial (C&I)** customers (ie, large businesses with direct access to the wholesale electricity market): Approximately two thirds of Intellihub's smart meter installations with C&I customers are through energy retailers, with one third being directly with the C&I customer. This accounts for approximately **Confidential to Intellihub: 10 - 20%** of Intellihub's smart meter revenue, and is also not a material income stream for Intellihub.

17 I have summarised the key terms of Intellihub's current arrangements with its electricity retailer customers servicing the mass market in a table which is included at Confidential Annexure JH-1.

3 Overview of smart metering in Australia

18 Through my role as Executive General Manager Strategy & Corporate Development at Intellihub, and because of my previous experience working at Acumen Metering and Origin Energy, I am aware of the history of the use of smart meters in Australia, and the associated regulatory requirements that apply to smart meters, which I summarise in the sections below.

3.1 Rollout of smart meters in Australia

19 Every connection to the electricity grid has a meter in place to measure electricity use. Over the last 10 years or so, these meters have transitioned from being legacy 'dumb' meters, which require manual readings and provide only basic usage data, to advanced or 'smart' meters.

20 A smart meter digitally measures energy use and provides accurate real-time information. Smart meters allow for remote meter readings (which enables customers to avoid the process of manual meter readings and estimated bills), remote connection and disconnection, and remote outage and supply quality detection. Smart meters also allow for the automated control of appliances. The data from smart meters provides consumers with better consumption information, giving them more control over how they manage their usage.

21 Smart meters are predominantly used in the electricity sector in Australia. The uptake of smart metering in gas and water to date has been very low. For this reason, all of my observations in the sections that follow relate to smart meters in the electricity sector, unless I expressly indicate that I am referring to the gas or water sectors.

22 Within the electricity sector, the vast majority of the supply of smart meters is to energy retailers that service 'mass market' customers. The other customer segments, being C&I customers and embedded networks, are not material relative to the overall smart meter industry.

(a) Mass market

23 The rollout and uptake of smart meters in Victoria has been significantly higher than in the rest of the NEM (New South Wales, Australian Capital Territory, Queensland, South Australia and Tasmania). I understand that this is because in 2006 the Victorian Government formally endorsed the roll out of smart electricity meters to all households and small businesses across Victoria under the Advanced Metering Infrastructure program (**AMI**). This was formalised by AEMO in the *National Electricity Amendment (Victorian Jurisdictional Derogation, Advanced Metering*

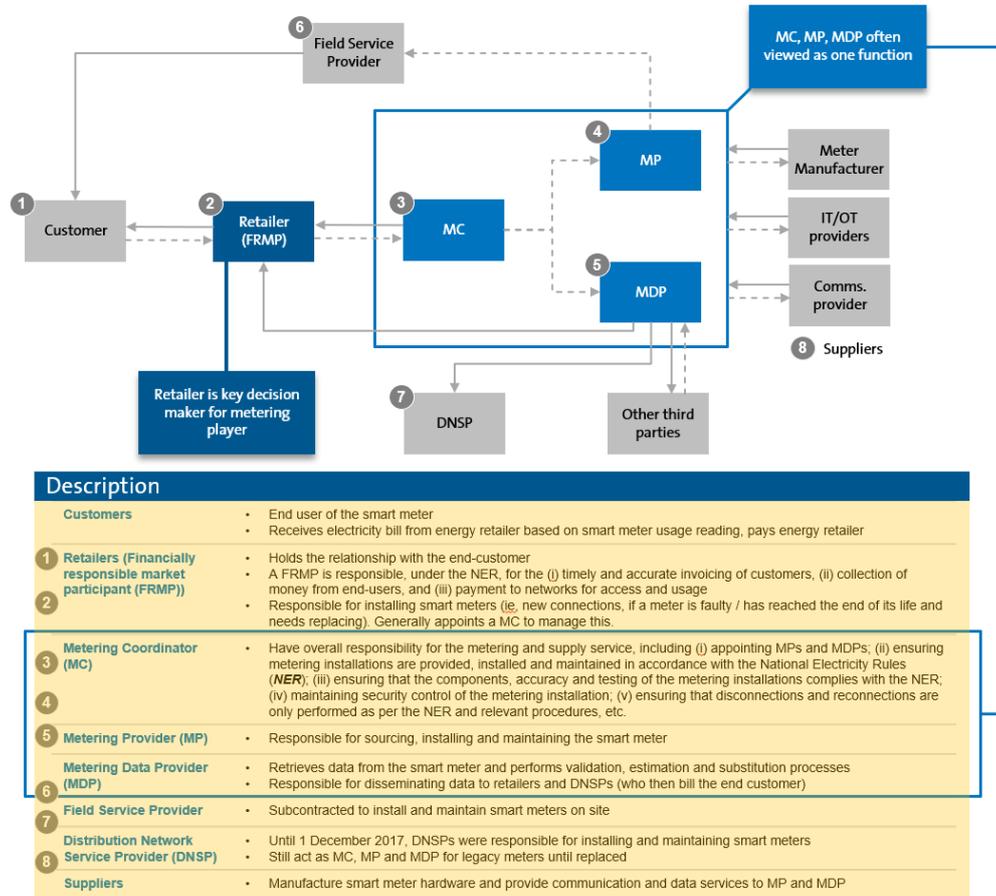
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Infrastructure Roll Out) Rule 2009 No.2. Under the AMI, local Distributed Network Service Providers (**DNSPs**) in Victoria are responsible for the roll-out of advanced metering infrastructure to the mass market. These meters form part of the regulated asset bases of DNSPs and are not contestable (meaning that Metering Coordinators are not currently active in the Victorian mass market).

- 24 I recall that following the launch of AMI, the rollout of smart meters to the mass market in Victoria began in earnest in around 2008, and within around 5 years, there was an approximately 99% penetration rate in Victoria.
- 25 Penetration in the other NEM jurisdictions across the mass market at this time was extremely low, I would estimate close to 0%. This changed with the introduction of the 'Power of Choice' reforms on 1 December 2017, which kickstarted the rollout of smart meters in the other NEM jurisdictions.
- 26 Under the 'Power of Choice' reforms, the Financially Responsible Market Participant (**FRMP**) (being the entity that is financially responsible under the National Electricity Rules for a connection point, which is typically the retailer) is required to replace legacy meters with smart meters when a new or replacement meter is needed. The FRMPs must appoint a Metering Coordinator to manage the process.
- 27 Intellihub is one of a number of Metering Coordinators operating in Australia. Metering Coordinators typically also perform the functions of Metering Providers and Metering Data Providers and are responsible for procuring smart meter hardware, arranging for the installation and maintenance of the smart meter, and providing relevant data to the energy retailer. More information on the role of a Metering Coordinator is set out in the Power of Choice Factsheet 2 – Role of the Metering Coordinator at Annexure JH-2.

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28 The diagram below illustrates the role of a Metering Coordinator, Metering Provider and Metering Data Provider in respect of the Australian mass market



- 29 The requirement that all new and replacement meters be smart meters has been critical in accelerating the rollout of smart meters in the NEM (excluding Victoria). The Australian Energy Market Commission's (AEMC) Draft Report (*Draft Report*) in its review of the regulatory framework for metering services estimates that the average smart meter uptake across the NEM (excluding Victoria) is around 30% in respect of the mass market. A copy of this Draft Report is included at Annexure JH-3, and this estimate is recorded on page 6 of the Draft Report.
- 30 The AEMC has expressed the view that the deployment of smart meters across the NEM (excluding Victoria) is happening too slowly. In its Draft Report, the AEMC expressed the view that if the rollout continues at the current trajectory, full penetration will not occur until 2040. A copy of this Draft Report is included at Annexure JH-3, and this estimate is recorded on page 6 of the Draft Report.
- 31 To address this, in its Draft Report, AEMC proposed further reforms on 3 November 2022 directed at a universal uptake of smart meters by 2030 in the NEM. I expect that when these proposed reforms come into effect, which may be around 2025, the pace of rollout to the mass market segment will rapidly increase, with Metering Coordinators competing fiercely to win new volumes with energy retailers. Although these reforms are also intended to apply to Tasmania, the position in Tasmania is slightly different as the Tasmanian State Government has committed to completing an accelerated rollout of smart meters in Tasmania by 2026.
- 32 I consider it likely that a close to 100% penetration rate across the NEM by 2030 is possible. My view is informed by the experience in Victoria after a universal roll out of smart meters was mandated in 2006. This was mandated through the Victorian State Government introducing amendments to the *Electricity Industry Act 2000 (Vic)*. A 2015 report published by the Victorian

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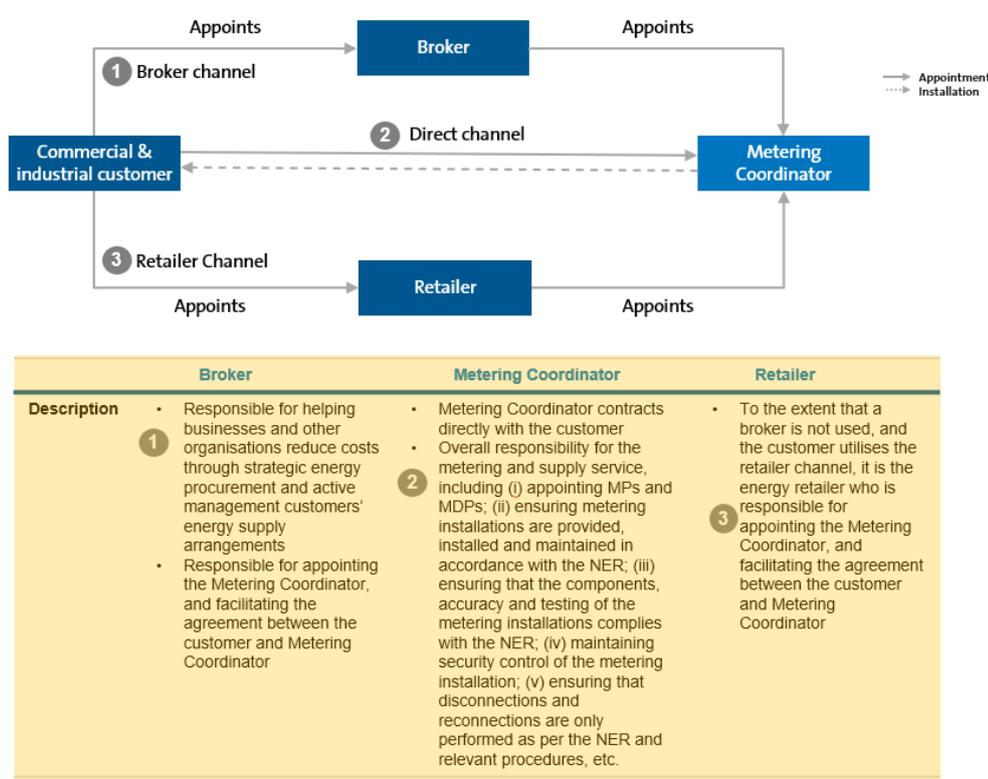
Auditor-General showed that as at 30 June 2014, 98.62% of target sites had smart meters installed. The Victorian Auditor-General noted that the outstanding 1.36% of target sites had issues which prevented smart meters from being installed, which included sites where the customer refused the smart meter, sites where the distributor had failed to attempt to install a smart meter, sites where the smart meter installed was not functioning as required, or sites in remote communities that were not available at an economic cost. It is my view that these factors will also apply across the NEM. The Victorian Auditor-General's report is available at <<https://www.audit.vic.gov.au/sites/default/files/20150916-Smart-Meters.pdf>>, and a copy is included at Annexure JH-4. The findings I have referred to in this paragraph are recorded at page 17 of that report.

(b) C&I customers

33 It has been a legal requirement for well over 10 years that all C&I customers' premises across the NEM (including Victoria) must have smart meters installed with a responsible Metering Provider / Metering Data Provider. Given this, I consider this segment to be almost fully penetrated across the NEM (including Victoria). Supply is driven primarily by replacement or greenfield development activities.

34 In terms of the 'Power of Choice' reforms, the C&I customer can enable a FRMP (energy retailer) to appoint a Metering Coordinator on its behalf to handle the installation of the smart meters, or alternatively it can appoint a Metering Coordinator itself.

35 The diagram below illustrates the various participants in the supply of smart meters to C&I customers.



36 In this customer segment, I estimate there to be ~135,000 installed smart meters across the NEM (including Victoria). I have calculated this estimate by applying a multiple of 1.2 to the total number of connections for large business electricity customers across the NEM (including Victoria). Intellihub applies a multiple of 1.2 to its asset base in the C&I customer segment to account for those C&I premises that have two smart meters installed at the same connection

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point, for example where a second meter is a 'check meter'. I obtained the data on the number of connections across the NEM (excluding Victoria) from the Australian Energy Regulator, Retail energy market performance update for Quarter 2, 2022-23 – Schedule 2 (15 March 2023), available at: <<https://www.aer.gov.au/retail-markets/performance-reporting/retail-energy-market-performance-update-for-quarter-2-2022%E2%80%9323>>, and I obtained the data on the number of connections across the NEM in Victoria at Energy Services Commission, Energy market dashboard, available at: <<https://www.esc.vic.gov.au/electricity-and-gas/market-performance-and-reporting/victorian-energy-market-report/energy-market-dashboard>>.

- 37 I consider that tenders for C&I customers are a lot more fragmented, with separate tenders being run for each C&I customer depending on each customer's individual requirements. C&I tenders run on a very competitive renewal cycle, as contract terms are much shorter, being held approximately every three to five years. In my experience, incumbent smart meter providers are often forced to offer competitive pricing when the contract comes up for tender again, and customers can and do switch to alternative providers through such tender processes.

(c) Embedded networks

- 38 I understand that there is a different regulatory environment applicable to embedded networks as they are classified as 'exempt networks'. The 'Power of Choice' regime does not apply. There are limited regulations governing the use of smart meters in embedded networks. The 'Electricity Network Service Provider – Registration Exemption Guideline' provides that new electricity meters in exempt networks must comply with requirements under both the *National Measurement Act 1960* (Cth) for meters installed from 1 January 2013, and minimum specifications for advanced metering under NER schedule 7.5 for meters installed after 1 December 2017 in jurisdictions that adopted the Power of Choice reforms. The AER '*Electricity Network Service Provider – Registration Exemption Guideline*' dated March 2018 is available at <<https://www.aer.gov.au/system/files/AER%20electricity%20NSP%20Registration%20Exemption%20Guideline%20-%20Version%206%20-%201%20March%202018.pdf>>. A copy of this document is included at Annexure JH-5.

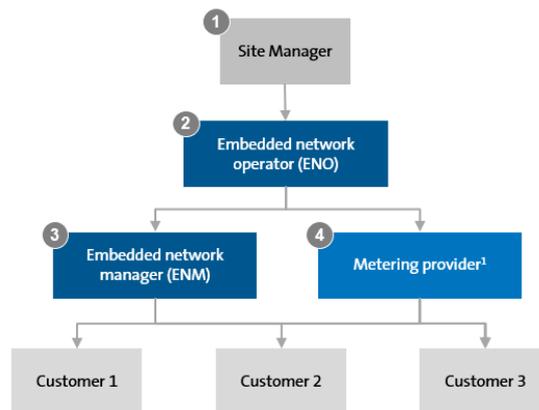
- 39 There is otherwise no requirement for smart meters to be installed in embedded networks across the NEM, including Victoria. Because of this, there is a continued use of legacy meters or manually-read meters (as opposed to remotely-read smart meters). Nonetheless, a large number of embedded network providers prefer to use smart meters and I estimate there to be approximately **Confidential to Intellihub: 355,000 – 850,000** smart meters installed in this customer segment across the NEM including Victoria. I have calculated this figure having regard to various publicly available sources, being:

- (a) the AEMC, *Final Report Updating the Regulatory Frameworks for Embedded Networks*, 20 June 2019, available at: <<https://www.aemc.gov.au/sites/default/files/2019-06/Updating%20the%20regulatory%20frameworks%20for%20embedded%20networks%20-%20FINAL%20REPORT.PDF>>, pages 17-20;
- (b) the previous NSW Government's announcement in relation to embedded network customers, available at: <<https://nswliberal.org.au/news/a-better-deal-for-embedded-network-customers>>; and
- (c) ESC, Victoria, available at: <<https://www.esc.vic.gov.au/electricity-and-gas/licences-and-exemptions/electricity-licensing-exemptions/embedded-electricity-network-data-and-customer-numbers#:~:text=There%20are%20a%20total%20of,by%20an%20embedded%20network%20operator>>.

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40 For embedded networks, site managers do not need to appoint Metering Providers but must become or appoint an Embedded Network Manager (**ENM**) as a minimum. There are many embedded network customer sites that retain ownership of the meters themselves or engage providers for manual meter reading services only. Others do, however, through their Embedded Network Operators, appoint metering providers.

41 The diagram below illustrates the various participants in the supply of smart meters to embedded network customers.



Description	
1 Site manager	<ul style="list-style-type: none">The embedded network is owned by the site manager (e.g. developers, owners corporations, shopping centre owners, aged care facility owners, or caravan park owners, etc.)Typically appoint an ENO to manage their responsibilities.
2 Embedded network operator	<ul style="list-style-type: none">Controls or operates the embedded network on behalf of the site managerAppoints the ENM and MPResponsible for purchasing electricity at the gate meter and on-selling to customers within the EN, managing billing, customer relationships and other operational elementsENO's must be registered with the AER
3 Embedded network manager	<ul style="list-style-type: none">Primary role is to provide market interface services which facilitate EN customers' access to on-market tariffsResponsible for applying to and registering with AEMO for a National Metering Identifier at child connection points (ie, points that connect customers within the embedded network to the parent meter)ENM must be accredited by AEMO
4 Metering provider	<ul style="list-style-type: none">Responsible for sourcing, installing and maintaining the smart metersResponsible for disseminating billing data to the ENO, who charges the end customer

42 I consider that competition in respect of embedded network customers occurs in a similar way to the mass market. In my experience, however, competition is much more fragmented for embedded networks as tender processes are on a customer-by-customer basis. These tenders can be for 100% of the customer's smart meter needs, as embedded network customers require a much smaller rollout than the typical mass market rollout, but can also be for only a portion of their requirements. In my experience, some tenders are run on an even more granular basis, that is, building-by-building, where, for example, there is a new building being constructed adjacent to an existing development (ie, a customer might run a new tender for its incremental requirements, rather than necessarily awarding the additional volumes to its existing provider).

3.2 Competition in the smart meter industry in Australia

3.2.1 Appointing Metering Coordinators

43 Electricity retailers have different approaches to appointing Metering Coordinators. In my experience, retailers typically issue a 'request for proposal' (**RFP**) and run a tender process with a view to appointing one (or in some cases, more than one) Metering Coordinator to deploy smart meters to their mass market customers.

44 Contracts are typically awarded for long terms (the most recent tenders have all been for seven or more years) but, in some instances, are awarded for shorter periods of time. In my experience,

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each energy retailer takes a different approach to allocating its contracts. The most common approach is for an energy retailer to run a tender process, and award most (or all) of the volume to one smart meter provider on an exclusive basis (or non-exclusive but sole basis over a long term time horizon). This provides the energy retailer with certainty in relation to its supply, while also providing it with the flexibility to maintain relationships with other smart meter providers. From the retailers' perspective, they acquire a complete smart metering service from a single provider. The individual components of the overall product supplied may either be supplied entirely by the Metering Coordinator or some parts may be outsourced (for example, field service providers are often contracted by the Metering Coordinator). Another approach is for an energy retailer to adopt a panel arrangement, whereby Metering Coordinators on that panel must continue to offer a high quality service to continue to be awarded volumes. Regardless of approach, Metering Coordinators compete vigorously for the available contracts or panel opportunities, as the consequence of not providing the best possible terms could result in a long term loss in business (noting the infrequent nature of these tenders).

- 45 In my experience, Metering Coordinators compete very aggressively during tender processes in respect of all aspects of service provision, being price, safety and compliance with requirements relating to matters such as life support customers, service levels, customer experience, scope and speed of data provision, and scope for additional services relating to DER, such as the ability to connect to customer devices and facilitate virtual power plants. This competition repeats with every tender. This is because the tender processes are run on an infrequent basis, and are typically for the roll out of a large volume of smart meters. Electricity retailers are sophisticated buyers who possess a high degree of bargaining power. If the best possible terms are not offered in these tender processes, it could result in a long term loss of business for the Metering Coordinator.
- 46 By way of example, Vector had been the incumbent Metering Coordinator for EnergyAustralia for a number of years but, in 2022, when EnergyAustralia issued a RFP for a significant volume of its smart meter rollout, Intellihub was the successful tenderer and was awarded a **Confidential to Intellihub** deployment contract for a minimum of **Confidential to Intellihub**% of EnergyAustralia's deployed volumes. By way of further example, Aurora Energy issued a RFP for meter deployment volumes in 2021. Aurora Energy had used Yurika as their sole deployment partner since the commencement of Power of Choice in 2017 (where Yurika won the RFP for **Confidential to Intellihub** smart meters). Intellihub was successful in Aurora Energy's subsequent RFP and in mid-2021 replaced Yurika as Aurora Energy's deployment partner, securing deployment volumes of approximately **Confidential to Intellihub** meters.
- 47 Intellihub has also lost a number of material smart meter RFPs to its competitors over the last few years. By way of example **Confidential to Intellihub**. In addition, Intellihub lost a RFP for meter deployment services for Ampol to **Confidential to Intellihub** in **Confidential to Intellihub**.

3.2.2 Commercial arrangements with customers

- 48 In my experience, Metering Coordinators negotiate an annual fee with energy retailers. This annual fee is then adjusted to a daily rate, which is calculated and invoiced to energy retailers on a monthly basis. There is typically no upfront charge for the installation of the smart meter itself.
- 49 This is because the end customer (ie, residential customer or small to medium enterprise) at the date of installation may, at a future point in time, switch to a different energy retailer or move premises, and the smart meter will stay with the property rather than move with the end customer. It would not make sense if a new smart meter had to be installed every time a customer moved properties or switched energy retailers.

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- 50 To solve this, Metering Coordinators generally charge the energy retailers a monthly service charge (as opposed to an upfront fee). The price is charged to the energy retailer (rather than the customer of the energy retailer) depending on which energy retailer the customer uses. In the case of Intellihub, this service charge is presently around \$**Confidential to Intellihub** a year per meter for each customer. **The AER's Default Market Offer Prices 2022-2023 Final Determination (May 2023) notes that the average cost per advanced residential meter is \$106, and the average cost per advanced meter for small medium enterprises is \$116. Intellihub's service charges are broadly consistent with these averages.**
- 51 When a customer switches energy retailers, in my experience the Metering Coordinator will cease invoicing the retailer that originally requested the installation, and will start invoicing the new retailer.
- 52 The commercial arrangements that a Metering Coordinator has in place with retailers reflect the fact that residential customers can easily switch between retailers. A Metering Coordinator will typically have two types of commercial arrangements in place with a retailer:
- (a) one pursuant to which the Metering Coordinator will install or rollout smart meters as requested by the retailer and provide ongoing services in relation to that meter (**Installation or Rollout Arrangement**); and
 - (b) a 'churn' arrangement, pursuant to which the Metering Coordinator will provide services to a retailer in respect of a customer that has moved or 'churned' away from the original retailer that requested the installation of the smart meter (**Churn Arrangement**).
- 53 A Metering Coordinator may only have a Churn Arrangement with a retailer in circumstances where the retailer does not use that Metering Coordinator to install or rollout smart meters. The Churn Arrangements are in place to address the situation where the Metering Coordinator does not have a Rollout Arrangement in place with a particular retailer.
- 54 Most Metering Coordinators have Churn Agreements in place with all retailers, or could quickly reach agreement with any retailer, to provide services in respect of a smart meter they had installed but where the customer had switched to a different retailer.
- 55 In my experience, it would be very rare for an established Metering Coordinator not to have a Churn Agreement in place with all major energy retailers. If, however, a Metering Coordinator does not have a Churn Agreement in place with an energy retailer, the Metering Coordinator will provide the metering services to the energy retailer on an uncontracted basis, until a formal contract can be signed.
- 56 Metering Coordinators are incentivised to offer competitive pricing and service terms in Churn Arrangements with major energy retailers for the following reasons:
- (a) **First**, when an end customer has moved or 'churned' to a new energy retailer, that energy retailer is able to displace any uncontracted meters at the customer's premises and replace it with meters from another provider if they are not happy with the price or terms offered by the incumbent Metering Coordinator. In practice, this means that Metering Coordinators need to offer competitive pricing and service level terms in their Churn Arrangements to prevent the energy retailer from displacing them with a third party Metering Coordinator. Meter displacement is a significant financial penalty for a Metering Coordinator because the Metering Coordinator cannot recoup the cost of the installation through ongoing Metering Coordinator fees. Metering Coordinators are incentivised to ensure this does not happen by offering competitive terms.
 - (b) **Second**, the primary goal of Metering Coordinators is to win RFPs for significant deployment volumes. To the extent that a Metering Coordinator offers unfavourable pricing terms, service levels or other terms under a Churn Arrangement, it risks affecting

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the Metering Coordinators reputation and relationship with that energy retailer, putting future RFPs for deployment volumes at risk.

3.2.3 Drivers of competition in the industry

- 57 Based on my experience working in the industry for smart meter providers such as Intellihub and Acumen Metering, I consider there to be a number of drivers of smart meter deployment in accordance with the 'Power of Choice' framework. These include:
- (a) installing smart meters at new connections;
 - (b) replacing meters when they become faulty / break;
 - (c) replacing 'families' of meters as they are retired at 'end-of-life' Based on my experience, meters typically have a 20 year lifespan, meaning that there are ongoing 'waves' of deployment as meters reach end of life; and
 - (d) customer 'additions and alterations', such as new solar installations, which require smart meters to be installed.
- 58 As discussed above, when AEMC's proposed new reforms come into effect (ie, the obligation to have 100% penetration by 2030), I expect that this will become an even more significant driver of deployment.
- 59 If a 100% penetration rate is achieved by 2030 across the NEM (excluding Victoria), I would estimate around eight million smart meters will need to be installed in total (assuming no growth in the current mass market customer segment). This estimate is calculated by applying a multiple of 1.1 to the total number of connections for residential and small business electricity customers across the NEM (excluding Victoria). Intellihub applies a multiple of 1.1 to its asset base in the mass market to account for certain residential and SME premises that have electrical configurations that require two or more smart meters to be installed. Based on my industry experience, I consider ~10% of customers fall into this category (resulting in an average of 1.1 smart meters per customer across the NEM (excluding Victoria) on average). I obtained the data on the number of connections across the NEM (excluding Victoria) from the Australian Energy Regulator, Retail energy market performance update for Quarter 2, 2022-23 – Schedule 2 (15 March 2023), which is available at: <<https://www.aer.gov.au/retail-markets/performance-reporting/retail-energy-market-performance-update-for-quarter-2-2022%E2%80%9323>>.
- 60 With the current rollout sitting at approximately 30% across the NEM (excluding Victoria), I estimate that only approximately 2.4 million smart meters have been deployed in the mass market to date. This leaves ~5.9 million contestable smart meters to still be installed to 2030. I estimate that approximately 50% of this volume has already been contracted, leaving approximately three million uncontracted and contestable smart meters to 2030.
- 61 If a 100% penetration rate is achieved by 2030 across the NEM (excluding Victoria), Intellihub estimate ~8.3 million smart meters will need to be installed in total (assuming no growth in the current mass market customer segment). With the current rollout sitting at approximately 30% across the NEM (excluding Victoria), Intellihub estimates that only ~2.4 million smart meters have been deployed in the mass market to date, leaving ~5.9 million contestable smart meters to still be installed to 2030. Intellihub estimates that either it or other metering providers have contracted approximately 50% of this volume leaving approximately 3 million uncontracted and contestable meters. I have reviewed the estimates prepared by a member of my team at Intellihub, and consider that the estimates accurately reflect my understanding of the current state of deployment in the mass market. The data on number of connections across the NEM (excluding Victoria) is available at Australian Energy Regulator, Retail Energy Market Performance update for Quarter 2, 2022-23 – Schedule 2 (15 March 2023) which is available at: <<https://www.aer.gov.au/retail->

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markets/performance-reporting/retail-energy-market-performance-update-for-quarter-2-2022%E2%80%93>.

62 Given the expected increase in electrification across this customer segment, I expect there to be an increase in the ratio of smart meters per mass market customer. It is therefore likely that the number of contestable smart meters deployed in the mass market segment from now to 2030 will exceed my initial estimate of ~5.9 million meters.

63 I consider that the above figures provide some idea of the significant 'first wave' still to be addressed by the NEM (excluding Victoria) over the next 7 years.

3.2.4 Competitors in the industry

(a) Mass market

64 I consider there to be two key ways to measure market shares:

- (a) **'flow'**: this is the number of new smart meters deployed by a market participant within a given period, divided by the total number of new smart meters deployed by all market participants over that same period; and
- (b) **'stock'**: this is the number of the cumulative meters installed and managed by a market participant as at a point in time, divided by the total cumulative number of smart meters installed at that point in time.

65 In respect of its position in the mass market, Intellihub considers market shares across the NEM (excluding Victoria). This is because, as addressed above, the Victorian rollout has occurred at a different pace, and with different competitive dynamics at play. In respect of C&I customers and embedded networks, Intellihub measures market shares across the NEM (including Victoria). This is because Victoria does not operate a separate regime in respect of C&I customers or embedded networks (as it does for mass market), so deployment across Victoria for these customer segments has occurred in a similar way to the rest of the NEM.

66 I do not consider market shares to be a reliable indicator of the competitive position of smart metering providers. Market share estimates are informative of past competitive performance and, in my view, do not indicate future competitive performance. This is because each new tender is its own competitive process and existing scale does not provide a material competitive advantage for any of the Metering Coordinators in future tenders.

67 In my experience, these deployment shares can also change rapidly as new tenders are awarded or as certain retailers commence their rollouts. Annual flows are primarily driven by retailer rollout decisions, which occurs after the contract has been awarded. Estimated market shares on flow can therefore change rapidly, as the rollout of smart meters volumes are typically dispersed unevenly throughout the term of the contract.

68 A market participant may have a number of successful tender wins, but if the contracted retailers do not prioritise their smart meter rollouts, this will not translate into deployment flow. Similarly, if a market participant had a single contracted retailer who is prioritising their smart meter rollout, this will translate into deployment flow which would overrepresent their market position.

69 However, set out below are the estimated number of smart meters deployed to energy retailers servicing the mass market across the NEM (excluding Victoria) as at 31 December 2022. These estimates are based on Intellihub calculations, which use deployment estimates from 2017 when the Power of Choice regime commenced together with deployment estimates from 2019 when AER reporting commenced, and compares those figures to the total stock reported by individual DNSPs in their submissions to regulatory information notices issued by the AER in 2021. For

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completeness, I note that the estimates provided below exclude legacy smart meters.

Supplier	Estimated number of smart meters deployed (units)	Estimated share (%)
Intellihub	Confidential to Intellihub: 485,000 – 725,000	Confidential to Intellihub: 20 – 30%
Vector	Confidential to Intellihub: 240,000 – 485,000	Confidential to Intellihub: 10 – 20%
PlusES	Confidential to Intellihub: 485,000 – 725,000	Confidential to Intellihub: 20 – 30%
Yurika	Confidential to Intellihub: 485,000 – 725,000	Confidential to Intellihub: 20 – 30%
Spotless	Confidential to Intellihub: 0 – 130,000	Confidential to Intellihub: 0 – 5%
Other (estimated)	Confidential to Intellihub: 0 – 130,000	Confidential to Intellihub: 0 – 5%
Total	Confidential to Intellihub: 1,700,000 – 2,920,000	100%

(b) **C&I customers**

70 A number of Metering Coordinators specialise in providing services to the C&I customer segment across the NEM (including Victoria), including Mondo and PowerMetric. Intellihub, Yurika, PlusES, Spotless and Metropolis also supply customers in this segment. The industry is very fragmented, with a long tail of small to medium-sized players.

71 The C&I customer segment forms a negligible part of Intellihub's business. Intellihub has approximately **Confidential to Intellihub: 7,000 – 14,000** C&I customer meters under management. Out of an estimated total market size of ~135,000, this gives Intellihub an estimated share of **Confidential to Intellihub: 5 - 10%** of the cumulative number of C&I meters across the NEM (including Victoria). Intellihub's estimated share has been calculated based on the number of cumulative meters installed and managed by Intellihub, divided by the total cumulative number of smart meters installed and managed in the industry at the time.

72 Intellihub does not have insight into its competitors' estimated shares of stock in this segment, but set out below are estimated shares of the supply of smart meters directly or indirectly to commercial and industrial customers in the NEM (excluding Victoria) for 2022 based on Intellihub management's understanding of the industry (including my understanding).

Supplier	Estimated number of smart meters deployed (units)	Estimated share (%)
Intellihub	Confidential to Intellihub: 7,000 – 14,000	Confidential to Intellihub: 5 - 10%
PlusES	Confidential to Intellihub: 27,000 – 40,500	Confidential to Intellihub: 20 - 30%
Yurika	Confidential to Intellihub: 27,000 – 40,500	Confidential to Intellihub: 20 - 30%
Mondo	Confidential to Intellihub: 14,000 – 27,000	Confidential to Intellihub: 10 - 20%
PowerMetric	Confidential to Intellihub: 7,000 – 14,000	Confidential to Intellihub: 5 - 10%

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Supplier	Estimated number of smart meters deployed (units)	Estimated share (%)
Other	Confidential to Intellihub: 7,000 – 14,000	Confidential to Intellihub: 5 – 10%
Total	~135,000	100%

(c) Embedded networks

73 Various Metering Coordinators specialise in providing services to embedded networks across the NEM (including Victoria), including Spotless, Intellihub, Yurika, PlusES, Metropolis and others. There is also a significant number of embedded network meters that are managed by customers themselves.

74 This segment also forms a negligible part of Intellihub's business. Intellihub has approximately **Confidential to Intellihub: 130,000 – 200,000** embedded network smart meters under management. Out of an estimated total market size of approximately **Confidential to Intellihub: 355,000 – 850,000**, this gives Intellihub an estimated share of **Confidential to Intellihub: 20 – 30%** of the cumulative number of embedded network smart meters across the NEM (including Victoria). Intellihub's estimated share has been calculated based on the cumulative number of meters installed and managed by Intellihub, divided by the total cumulative number of smart meters in the market at that point in time.

75 Intellihub does not have insight into its competitors' estimated shares of stock in this segment, but set out below are estimated shares of the supply of smart meters to embedded network energy retailers servicing embedded network customers, which is based on Intellihub management's understanding of the industry (including my understanding).

Supplier	Estimated number of smart meters deployed (units)	Estimated share (%)
Intellihub	Confidential to Intellihub: 130,000 – 200,000	Confidential to Intellihub: 20 – 30%
PlusES	Confidential to Intellihub: 130,000 – 260,000	Confidential to Intellihub: 20 – 40%
Yurika	Confidential to Intellihub: 0 – 65,000	Confidential to Intellihub: 0 – 10%
Spotless	Confidential to Intellihub: 30,000 – 130,000	Confidential to Intellihub: 5 – 20%
Other	Confidential to Intellihub: 65,000 – 200,000	Confidential to Intellihub: 10 – 30%
Customer-Managed		
Total	Confidential to Intellihub: 355,000 – 850,000	100%

(d) Potential for new entry

76 In addition to existing providers I have already discussed, I consider there to be a number of opportunities for new entry across all segments of the industry for the following reasons:

- (a) First, as I explained in section 3.2.3 above, expanding demand would support a business rationale for entry by new entrants. This is because the AEMC's 2030 goal of 100% penetration in the NEM will drive a significant increase in demand and provide opportunities for entry and expansion;
- (b) Second, in terms of likely candidates to enter the supply of smart meters and related services, there are a large number of potential competitors in the form of large multi-

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nationals such as Google, Amazon and Tesla. They could extend their energy verticals to smart meters (consistent with their strategies to compete for the ecosystem of the home);

- (c) Third, in addition to large multinational players, there is a possibility of new entry by retailer 'sponsorship'. By way of example, Intellihub signed a long-term smart metering deployment and services agreement to rollout up to **Confidential to Intellihub** smart meters to customers of electricity retailer **Confidential to Intellihub** in New Zealand over a **Confidential to Intellihub** period. This agreement provided Intellihub with a foothold into New Zealand.

4 Proposed transaction

4.1 Background to Intellihub / Origin relationship

77 Origin used to have its own smart metering business, Acumen. I am aware from my previous role at Acumen and my current role at Intellihub that Origin divested the Acumen business in June 2018 to Intellihub (then a joint venture between PEP and Landis+Gyr) for \$267 million.

78 The sale of the Acumen business included the management and servicing of around 170,000 smart meters already deployed, and a long-term contract with Origin for the installation of **Confidential to Intellihub: a significant number of** smart meters across Australia over the period 2018 to **Confidential to Intellihub: an end date in the future**, as well as a **Confidential to Intellihub: volume-related contractual commitment**. **Confidential to Intellihub**. This contract formed the basis of the Intellihub business. The contract was varied in March 2022 (at the time Brookfield's investment in Intellihub was completed) to increase the volume commitment to **Confidential to Intellihub: a material proportion of Origin's smart meter requirements**, extend the term to **Confidential to Intellihub: a later date**, and included **Confidential to Intellihub: further contractual commitments**.

79 Intellihub is not the exclusive supplier of mass market Metering Coordinator services to Origin. So far as I am aware, Origin has not held an official RFP for additional volumes since selling the Acumen business, but has acquired smart meters and related services from Vector since 2016 and continues to use Vector.

80 Based on the Australian Energy Regulator's retail energy market performance update for Q2, 2022-23, I estimate that Origin will have approximately **Confidential to Intellihub** mass market customers across the NEM (excluding Victoria) by 2030. This estimate is calculated by adding the total number of connections attributed to Origin for residential and small business electricity customers across the NEM (excluding Victoria) and multiplying it by 1.1, and then forecasting new connections to 2030. The data on number of connections attributed to Origin across the NEM (excluding Victoria) is available at Australian Energy Regulator, Retail energy market performance update for Quarter 2, 2022-23 – Schedule 2 (15 March 2023), available at: <https://www.aer.gov.au/retail-markets/performance-reporting/retail-energy-market-performance-update-for-quarter-2-2022%E2%80%9323>.

81 I understand that at the time of making this statement, Origin has currently only contracted **Confidential to Intellihub** of its smart meter requirements to Intellihub, at least **Confidential to Intellihub** of Origin's smart meter requirements to 2030 remain contestable.

82 I understand that a consortium of Brookfield and MidOcean Energy has offered to acquire all of the shares in Origin (the **Proposed Transaction**).

4.2 No ability or incentive to provide Origin with a significant advantage

(a) Intellihub faces significant competitive constraint

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- 83 As noted above, I consider the smart meter industry to be very competitive. There are a number of large smart meter providers (Yurika, Spotless, Plus ES, Vector and Metropolis) that compete with Intellihub, as well as a number of smaller players. I have set out a high-level description of each of the key Metering Coordinators in Australia in Annexure JH-6, which is a continuation of this statement.
- 84 If Intellihub stopped supplying Origin's competitors after the Proposed Transaction was completed, or otherwise sought to favour Origin over its other customers, Origin's competitors would simply purchase smart meters from one of the many other established suppliers in the industry.
- (b) Intellihub cannot reserve parts of its service offering exclusively for Origin**
- 85 Origin is only one of Intellihub's customers. Intellihub's revenue from servicing Origin's mass market customers currently accounts for **Confidential to Intellihub**% of Intellihub's Australian revenue, or **Confidential to Intellihub**% if embedded customers are included, with this percentage gradually trending down due to the diversification of Intellihub's customer base.
- 86 If Intellihub sought to discriminate against its existing customer base by reducing the quality of its offering or increasing its prices, it would not only be in breach of its commercial obligations but would risk losing the vast majority of its existing revenue stream. This is because a number of Intellihub's agreements with energy retailers contain contractual service levels **Confidential to Intellihub**.
- 87 In terms of future opportunities, there is also a material risk that if Intellihub held back a genuinely competitive service offering in respect of a retailer tender, it would risk losing that opportunity to one of its competitors.
- (c) Intellihub's operating model is agnostic as to end customer identity**
- 88 Intellihub operates a business-to-business (**B2B**) model which is agnostic as to the identity of the energy customer, with a strategic focus on servicing energy retailers rather than end customers. Intellihub has adopted this agnostic business model to reduce the risk of asset churn, as it reduces the frequency of its assets being removed from a premises when the end customer decides to switch between energy retailers. In my view, if Intellihub sought to bundle its smart meter product with a single energy retailer, such as Origin, and limit its interoperability with other energy retailers, the risk of asset churn would significantly increase. This is because each customer of the bundled energy retailer that switches to a new energy retailer would trigger the removal of Intellihub's smart meter asset.
- 89 In addition, Intellihub's systems are also highly automated, meaning that a service or maintenance request is allocated depending on the order in which it is received. Intellihub does not have separate operations teams for each customer. Its operations team services all of its retailer customers.
- 90 This means that, in practice, Intellihub has no way of preferencing Origin's deployment or service or maintenance requests to the detriment of Origin's competitors.
- (d) Limited (if any) access to confidential information**
- 91 Intellihub has access to limited, if any, commercially sensitive information. The information exchanged between Intellihub and its customers is primarily process related (ie, service orders, national meter identifier (**NMI**) data, and meter data) and would not, in my view, be of any benefit to a competing energy retailer. This information is made available to a metering provider once it is appointed as a Metering Coordinator for a given site through the Market Settlement and Transfer Solutions (**MSATS**) system which is regulated by AEMO.

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92 In many instances, Intellihub is also required to delete any end-customer information from its systems – and retains only key information necessary to, for example, manage maintenance going forward.

93 In my view, Intellihub could not use confidential customer information to benefit Origin in any way.

(e) **Confidential to Intellihub**

94 **Confidential to Intellihub. Confidential to Intellihub.**

95 **Confidential to Intellihub:**

(a) **Confidential to Intellihub.**

(b) **Confidential to Intellihub.**

(c) **Confidential to Intellihub.**

(d) **Confidential to Intellihub:**

(i) **Confidential to Intellihub;** and

(ii) **Confidential to Intellihub.**

(e) **Confidential to Intellihub.**

96 **Confidential to Intellihub: To the extent that the Proposed Acquisition proceeds, a competition protocol will govern use of information, staff separation, restrict communication, and reinforce physical and electronic separation, and physical access restrictions.**

(f) **Ownership structure**

97 In the Proposed Transaction proceeds to completion, Intellihub will be held in a different Brookfield fund to the BGTF, in a separate business group, with its own separate board and management team to Origin. As I noted earlier, BIF IV owns 50% of Intellihub. The remaining 50% is held by PEP. I understand that a different Brookfield fund, namely BGTF, will hold the investment in Origin.

98 The 50% ownership by PEP in BIF IV also means that PEP would never allow Intellihub to be operated to forgo profits or reduce service levels designed to benefit or give Origin an undue competitive advantage.

99 Intellihub is managed day-to-day without the involvement of Brookfield. The Intellihub board and management team does, and will continue to, make its own business decisions including investment and capital expenditure decisions.

Signed by Jonathan Hammond

on ____ May 2023

Signature of Jonathan Hammond