Inquiry into the Feasibility of Undergrounding Transmission Infrastructure

Legislative Committee for State Development

Responses to Questions Taken on Notice at Hearing No. 2

No.	Question or Action Required	Action/Question Finalised
	Ms CATE FAEHRMANN: What was the original—how long ago was it, 2018? The cost of HumeLink has increased almost five-fold since then. What was the original cost estimate of HumeLink in 2018? MARIE JORDAN: I'm sorry, I don't know that figure. We'll take that on notice, what the original cost was. When we talk about the original cost, I believe that's the one that the ISP uses—the construction cost reports—and then we go through and do a detailed study. At that point, it's very much on without	The Project Specification Consultation Report, published in June 2019, which is the 1st (of the 3) RIT-T documents outlines various options for the HumeLink project. Option 3C in the report is the closest to the project Transgrid is progressing, which was a Class-5 estimate (meaning very preliminary) at the time to be $1.35 billion. This estimate did not include biodiversity offset or land, property and risk costs, which were approximately $1.38 billion. Class 5 refers to a 0% to 2% maturity level in defining the project deliverables, which means that the scope is not clearly defined, along with deliverables. The limited scope definition means the estimate has a large uncertainty range which is globally accepted as between - 50% to 100%. In the current environment across Australia, we are seeing infrastructure costs increasing, by up to 30 per cent in real terms – nominal dollars are calculated as an increase closer to 50%. Transgrid's revised cost of $4.9 billion is a 26% real cost increase compared to AEMO's 2022 ISP. The updated cost reflects the tightening global supply chain post-Covid and significant cost increases in construction, building, material and skilled labour costs in a highly competitive market.

	looking at specifics of the area. I know that to be fact. Once we started to get through that process, I believe the number that I saw after we had looked at it, but I'm going to look at Jeremy to kick me under the table if I'm incorrect, was $3.3 billion. JEREMY ROBERTS: So 3.3 was the last assessed cost that was published prior. Ms CATE FAEHRMANN: The last one. That's what you gave this Committee three weeks ago. MARIE JORDAN: Then when we look at the cost adjusted and then to today's cost, it's a 26 per cent, 27 percent	
2..	Ms CATE FAEHRMANN: In relation to the capacity of HumeLink, I understand that it has decreased from what it was when it was originally	Transgrid's RIT-T documents states the Additional Network Capacity of HumeLink is 2,570 MW. However, recently published Transmission Expansion Option Report from AEMO reported Additional Network Capacity of HumeLink is 2,200 MW. The lower number in AEMO's report reflected revised study assumptions of Interstate power transfer.

	proposed. The capacity is now 2,200 megawatts, which has decreased, I think. Is that correct? JEREMY ROBERTS: I will have to confirm whether it was decreased, depending on which way the power is flowing: whether it's flowing towards Snowy to pump up or whether it's discharging. I will take that one on notice—of the parameters changing. Ms CATE FAEHRMANN: If Snowy 2.0 does get built—I am just trying to understand capacity here—what will be the capacity requirements of Snowy 2.0? Are you aware of that, or am I asking you detail that is—	The nameplate generation capacity of Snowy 2.0 is 2040MW as per AEMO's Generation Information resource published in July 2023. HumeLink is an essential project to deliver power from renewable generation from southern NSW including Snowy 2.0, SA and VIC generation via Project EnergyConnect and VNI West.

	MARIE JORDAN: Sorry, the detailed information like that on specific megawatt hours, I do not have that.	
3.	Ms CATE FAEHRMANN: I just wanted to ask about the fire situation. I appreciate you, Ms Jordan, clarifying some of that at the beginning in terms of your opening statement. At the last inquiry, I think Mr Redman said that in Australia we can't find any instance of a bushfire started by any transmission line more than 66 kV, and one of the main reasons is that trees fall onto transmission lines and that Transgrid employees keep that pretty clear. But you did listen to the hearing in Tumut, and I think we had similar evidence before us in Armidale. We heard evidence from the deputy fire commissioner, I believe. They talked about the	Transgrid's investigation of electricity network incidents (including asset-related fires) is a comprehensive process that aligns with industry best practices as well as Transgrid's commitment to bushfire, public & personnel safety, reliability, and continuous improvement. Our approach to investigating such incidents follows a systematic method which identifies root causes and subsequently implements corrective and/or preventive measures. Key steps include: **Network Monitoring**: The electricity network is monitored 24/7 via operations control centres which have situational awareness of incidents/events and incident response capacity. Transgrid also uses CCTV monitoring at substations to scan the surrounding environment and has communication channels in place with emergency services including the RFS via the RFS ICON system; Energy Utilities Functional Area Coordinator (EUSFAC); and the State Emergency Operations Centre (SEOC). We also employ safety and security signage across our network to enhance public safety and encouraging the public to report any suspicious behaviour or incidents regarding our assets. **Immediate Response**: In the event of a fire-related incident involving an asset, our priority is to ensure the safety of personnel, nearby communities and responders. Immediate actions are taken to identify potential hazards and make-safe the areas, where possible minimise impacts, and mitigate further escalation. **Recording of Evidence**: This includes securing the affected area (where Transgrid has control, such as a Substation) or obtaining access to the area (when under the control of RFS or a property owner). Transgrid documents the condition of the relevant assets, impacted areas, and collects available system data (for example via our Supervisory Control and Data Acquisition system, protection, control, or any other network monitoring systems available) images, and witness statements. **Root Cause Analysis**: Our investigators perform root cause analysis to identify any underlying factors that contributed to the incident. This follows the ICAM method and typically involves examining equipment condition, maintenance records, environmental/climatic conditions, processes, and any potential human factors.

	arcing from the lines. Sometimes the lines, in very intense fire conditions—those firestorms, if you like—can touch each other. And they did say that they were bigger transmission lines that were causing that. Did you hear that evidence? MARIE JORDAN: I did and when I went back to my asset management team, they checked our records back to 1960, and we do not have any information that supports that we started a bushfire, since 1960, with our transmission lines. Ms CATE FAEHRMANN: What do you need in terms of requiring evidence? How do you collect that evidence? Because this was evidence from local members of the community as well as people	**Data Analysis**: Utilising data from asset monitoring systems, control centres, and other sources, we analyse the sequence of events leading up to the incident. This helps in understanding the chain of events, potential triggers incident impacts and informs any preventative/corrective actions necessary. **Expert Collaboration**: In complex incidents, we collaborate with experts from various fields, including engineering, vendors/manufacturers, industry subject matter experts, emergency services and regulatory specialists. This interdisciplinary approach ensures, among others, a sufficiently resourced investigation and identification of contributing factors. **Regulatory Compliance**: Our investigations align with our IPART (Transgrid's NSW Regulator) reporting requirements, as well as cooperation with any external investigations (for example emergency services) that may be required. **Corrective and Preventive Actions**: Based on the investigation findings, we develop and implement appropriate corrective and preventive actions. These actions may involve equipment upgrades or replacements, procedural enhancements, training, and more. **Communication and Reporting**: We communicate investigations comprehensively and transparently throughout our organisation. This includes sharing lessons learned, actions taken, and any recommendations for improving asset management and fire risk mitigation strategies. **Continuous Improvement**: Our commitment to continuous improvement means that the investigation process is an ongoing cycle. We revisit investigation outcomes periodically to assess the effectiveness of implemented measures and consider opportunities for further improvements. The investigation process aims to extract valuable lessons that can be applied to prevent similar incidents occurring and inform our continuous improvement framework. Please note it is important to clearly delineate between distribution lines, which are the poles and wires commonly found in suburbs and the transmission lines designed to transport energy from the generator to distribution centres.

	who were volunteers of their bushfire brigade. I understand one of them was a bushfire brigade captain who gave evidence saying that, yes, he has seen it with his own eyes—the arcing from the transmission lines. Somebody else was saying that they touched, and they saw the fire start. How do you collect evidence of fires that start, in terms of your responsibility? MARIE JORDAN: I will take that on notice so it can be detailed and appropriate from the asset management organisation. I did hear, quite often, a reference to powerlines, and not specifically transmission lines. And I also heard a lot of discussion about PG&E undergrounding 10,000 miles of powerlines, and those powerlines—they have chosen to underground the highest risk lines,	

	and those are the distribution lines. The commitment on that underground does not underground any transmission in California. Typically, in California, if you go back through the fire starts there—and I lived through a lot of those—they were distribution powerlines. They had different criteria and settings on those lines that do not match how a transmission line is run. So I will take that on notice—on how we do the investigation—and get back to the Committee with that information.	

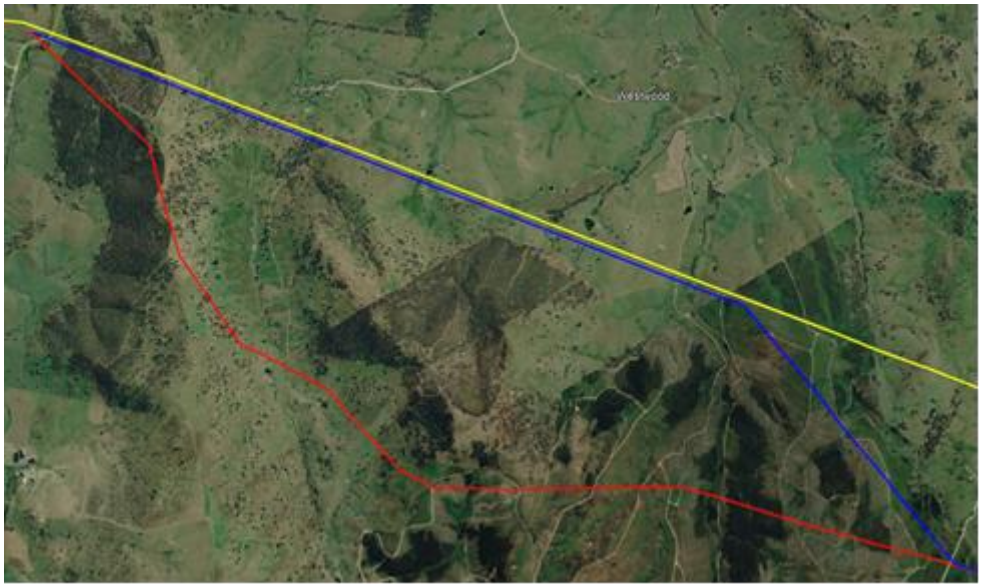
4.	The Hon. WES FANG: So we are at about $4.89 billion. Do you know how much Transgrid has spent in relation to procurement at this stage? JEREMY ROBERTS: I'll come back with the exact figure, Mr Fang, so I don't give an approximation.	Transgrid has committed approximately $334 million in procurement for long lead specialised equipment including transformers, reactors, conductors and contractor costs.
7.	The Hon. EMMA HURST: Have any variations to the route been made because of the impacts on animals or the environment to date? Have you made any decisions that this was going to be too impactful in certain areas? JEREMY ROBERTS: Very early on in the route selection process, that forms the high-tier requirements of constraints, of	Declared Wilderness Areas are considered to be a Tier 1 constraint and National Parks and Nature Reserves were considered to be Tier 2 constraints in the HumeLink route selection process. The route avoids these constraints. Heavily treed areas with native vegetation were avoided to the extent possible, as clearing of those areas would generally result in greater loss of vegetation integrity than in more open areas. For example, reduced clearing and the minimisation of associated plant community type impacts contributed to the selection of the route north of Tumut over the Blowering alternative. Similarly, reduced plant community type impact was a factor that contributed to shifting away from paralleling Line 51 along the western edge of Gilmore Valley to a route running through Green Hills State Forest. We have also aimed to minimise the extent of riparian zone impacts. Where practicable, the route crossed water courses at a right angle and minimised the need for riparian zone clearing. For example, a route with a single crossing of the Murrumbidgee was selected over a straighter route that would have involved three crossings of the river. A similar approach was taken for the Tumut River.

	where we can avoid—always trying to avoid and then mitigate impacts to the environment. That was definitely formed very early on in the route selection process to refine the route. The Hon. EMMA HURST: When you are deciding where the route will be, have there been any assessments where you've said, "Actually, we can't go through here because of the impact on the environment," rather than a general consideration from the beginning? JEREMY ROBERTS: I am happy to take that on notice and come back and give some examples to you.	
8.	The Hon. PETER PRIMROSE: Can I ask one question? I note the clock is ticking down here. I am	The price impact to consumers from HumeLink requires information on the expected impact of these investments on the transmission, wholesale and retail components of the consumer bill, government policy impacts and assumptions on whether the retailer will pass on

	just taking up a point that was raised by my colleague in relation to a question on notice. The question was: What the percentage increase to the consumer bill would be if HumeLink was undergrounded or some statistic around that increase? Your answer was, and I quote from the first sentence: The CPA-2 for HumeLink will look at the indicative impact on consumer bills over the 2023-28 period from our investment in HumeLink, this will be lodged with the Australian Energy Regulator (AER) in October. I know that work is underway but, in terms of our timetable—which is really the end of August—I was wondering in terms of the economic modelling that's being done for that, and particularly some of the statistics	the wholesale cost savings to consumers. The required analysis is complicated. The Australian Energy Market Operator (AEMO), is best placed to undertake this analysis as it has access to the full suite of information on the wholesale impacts. AEMO has committed to publishing the price impact to consumers from investing in an Integrated System Plan (ISP) project. This analysis will consider the cost impact of both overhead and underground.

	that are feeding into that modelling, whether it would be possible for us to get access to some of that. Because that might be of value for us in trying to meet our terms of reference, in terms of the potential cost to consumers of their bills if it was undergrounded. MARIE JORDAN: We have an executive joint planning committee where all the TNSPs and AEMO get together, and I do know they are frantically rebuilding the ISP 2024 draft. I do not believe that information would be available. They have to run it at their level. They have to get all the planning inputs in. I don't think it would be available by the end of August, but I think that would be a good question for AEMO if there was an ability to do that. I just	

	know from conversations, it's a very detailed process, building all that economic modelling in. The Hon. PETER PRIMROSE: Do us a favour, maybe, and take it on notice because the up-to-date statistics, and particularly the econometric modelling, might be of value, if there is anything available that we could feed into the process.	
10.	Response to question taken on notice regarding specific landowner: WES FANG: That's a very interesting answer, Mr Roberts, because one of the properties that we went to see just to the north of Tumut—and I'm just trying to remember the name of the road. It was over where the Dunns Road fire was. The property had a set of maps, and we sat at the top of the hill looking	The Trangrid team investigated the specific landowner concerns and confirmed that the proposed alternate route realignment unfortunately was not within the funding and approval conditions of the project. HumeLink's funding is subject to the approval of the Australian Energy Regulator (AER). To be granted the required funding, Transgrid must demonstrate benefits from the project to electricity consumers. *In addition, Transgrid is obliged under the NSW State Government and Federal Government approval pathways for state and national significant infrastructure projects to determine a route that minimises net impact.* *Findings from the investigation:* - Engineering complexity – Preliminary design estimates an additional 10 tension towers required. - Increase cost on this section of the alignment – approximately 30% more across the Yaven Creek area. - Increase environmental impacts – approximately 60% increase in impact on woodland forest. - Removing only one easement impacted landowner is a small variance at a significant cost. In addition, the principles for route selection state where possible Transgrid aim to minimise overall line length, parallel existing lines and minimise the number of line crossings. The constraints criteria that were triggered for the proposed route

	over the valley. They said that there had been discussions with Transgrid about the possibility of moving the line and it was to head further south instead of going straight through the valley and through people's properties. It wasn't until the maps were published that they realised that it basically kept going straight through the property that we were inspecting. So where there has been a clear position of those landholders saying to you, "We don't want to go this way; how about you go this path?"—and there has been a lot of discussion around that—and they discover, when the maps come out, that all that consultation has been rejected, how does that occur? JEREMY ROBERTS: I'm not aware of that exact scenario, Mr Fang. I would be happy to take that one on notice	realignment included a network operational risk, forested area, and land use and operations (incl. aerial sp raying). As such, the original alignment is shorter, runs parallel to the existing line, has less environmental impacts and is less of a network operational risk. **Key for the map below:** Red line: Proposed alternate LO deviation from residents (Yaven Creek) Yellow line: Existing 330kv line 51 Blue line: Transgrid proposed 500kv  ~~~

	to understand the exact scenario. However, we undertake the constraints mapping and we consider the environmental impacts through our route selection. We consider the cost in determining which route selection we undertake, and then also the time to do that change and also impacting how many landowners. So if there are 10 landowners in one area and 10 landowners in the other area, is it less of an impact or just a different impact for different people? All of those factors are considered. But on that exact example, I will take it on notice to consider what feedback should have been given prior. The Hon. WES FANG: I will give you some details as well. I understand it was a bit vague; my apologies. It has been a bit of a rush to get sorted	

	into this position after this morning. I	
11.	The Hon. STEPHEN LAWRENCE: Does that process involve the application of the regulatory investment test for transmission, which I think is called RIT-T, or is that a separate thing? MARIE JORDAN: No, the RIT-T test concludes with the PACR. Then, what we do with the very large projects, and I believe this is fairly new—and jump in at any point, Jeremy—we go through a process to confirm the dollar amounts. Each one of these tests—a CPA is what? JEREMY ROBERTS: A contingent project application. We undertook contingent project application one, in which we sought funding to	Transgrid's HumeLink Project Assessment Conclusions Report (PACR) published in July 2021 showed that the preferred option (Option 3C) would deliver weighted net market benefits of approximately $491m over the assessment period, in present value terms. HumeLink's PACR modelling assumptions were consistent with the final AEMO 2020 Integrated System Plan (ISP). Competition benefits were included in the PACR assessment with significant benefits expected from the preferred option through increasing the competitiveness of bidding in the wholesale market (referred to as 'competition benefit' under the RIT-T). The PACR is the final stage of the RIT-T process, hence Transgrid is not required to continue retesting the net market benefits. However, AEMO as part of its ISP, does continue to consider net market benefits. This includes for the 2022 ISP in which Humelink was shown, under the Step Change scenario, to deliver $1,303m in net market benefits. We expect AEMO, in the Draft 2024 ISP to be published in December, to provide an update on HumeLink's net market benefits considering the most recent cost estimate.

	develop the project to get it to a certain cost certainty, to allow now the market operator to confirm that it is still on the optimal development pathway. That process is still ahead of us and we will look to try to have a published result by December this year. MARIE JORDAN: So by the time you get to the point where we are, with going in for CPA two, you'll have a strong reasonableness of your numbers because you've done some of the early works and you get a good sense of the project cost. Then they take that last step of running, once again, a feedback loop to ensure that it fits and it's still a market benefit for consumers. There are a lot of checks and balances along the way.	

	The Hon. STEPHEN LAWRENCE: So you don't have to reapply the RIT-T test in light of these cost increases? MARIE JORDAN: No, we don't. The Hon. STEPHEN LAWRENCE: Would you agree that when the project commenced its cost meant that it was right at the margin in terms of approval in the regulatory process? MARIE JORDAN: I just had my colleague whisper in my ear it was $491 million of market benefits for HumeLink at the PACR. The Hon. STEPHEN LAWRENCE: I think the figure	

	that I had might have excluded environmental community cost and the competition benefits. Does that sound right? MARIE JORDAN: In the RIT-T? I don't believe—let me take that one on notice to make sure that I'm accurate. The Hon. STEPHEN LAWRENCE: Sure. MARIE JORDAN: I don't want to speculate, but usually when you go through the RIT-T process you've put all those costs into your number and then they run a market-benefit analysis based on that investment dollar.	
12.	The Hon. STEPHEN LAWRENCE: There has been an array of evidence that I suspect you probably reviewed, which is to the effect that the regulatory	The National Electricity Law (NEL) establishes the overarching legal framework for the National Electricity Market and sets out the roles of governing bodies. These include the Australian Energy Regulator (AER) who is responsible for economic regulation of transmission in Australia. Under their rules, Transgrid must propose the most efficient route for transmission that is in the long-term interests of consumers of electricity with respect to price, quality, safety, reliability and security of supply of electricity. The AER holds Transmission Network Service Providers (TNSP) to these principles through the Regulatory Investment Test for

	test that HumeLink has to satisfy does not take into account a variety of environmental and community costs. Would you agree with that as a broad proposition? JEREMY ROBERTS: The assessment is done on the environmental impacts as required by the Department of Planning and Environment, which is going through a calculation method for the biodiversity offsets. The impact of the project is assessed versus the biodiversity offsets. That's included in that price, and our latest cost estimate includes the environmental impacts, as required to do a project in New South Wales of this size through the DPE	Transmission (RIT-T) and regulatory submissions. The RIT-T is designed to ensure the benefits of investment outweigh the costs, ensuring consumers only pay for infrastructure that is needed. This is driven by the National Electricity Rules (clause 5.15A.1(C)) which states that the purpose of the RIT–T is to identify the network option that maximises the present value of net economic benefit to all those who produce, consume and transport electricity in the market. Transgrid's assessment of options includes the capital cost of the solution, the ongoing operational costs, the market benefits, the expected reliability, and the costs associated with the impact on landowners, the community, and the environment. Transgrid's assessment of options includes the capital cost of the solution, the ongoing operational costs, the market benefits, the expected reliability, and the costs associated with the impact on landowners, the community, and the environment. The development of the preferred transmission line options involved a comprehensive process ranging from this RIT-T process through to the more detailed route identification and corridor refinement process which ultimately formed the project as described and assessed in the environmental impact statement (EIS). These processes involved significant engagement with landowners, communities and key stakeholders and considered environmental impacts. The transmission line corridor identification and route refinement process began around late 2019 by carrying out a corridor options assessment based on mapping and analysis of high-level constraints. An initial study corridor that was between one and five kilometres wide was published in April 2020 and formed the basis for community and stakeholder engagement activities. From 2020 to 2022, several modifications and refinements were made to the initial study corridor as a result of consultation with landowners and stakeholders, site visits, design development and improved understanding of constraints through field studies and environmental assessment. The project has been further developed to avoid and minimise impacts where reasonable and feasible to do so and has been informed by stakeholder and community feedback in addition to other considerations. This included iterative refinement of the potential transmission line corridor as well as assessment of alternative locations for key project components including Gugaa 500 kV substation and construction compounds and worker accommodation facilities. The proposed transmission line corridor and locations for all key project components were selected on the basis of best meeting the project objectives and avoiding and minimising the impacts on communities and the environment. The EIS has been prepared in accordance with the Planning Secretary's Environmental Assessment Requirements (SEARs), the Supplementary

	MARIE JORDAN: Could you be referring to the multi-criteria analysis that's used in Victoria, where there are other inputs into the process that are considered? Because those do not apply, if that's what you're referencing. They don't apply in New South Wales today. The Hon. STEPHEN LAWRENCE: This is a level of generality, but I was referring to, for example, Ms Andrea Strong, who gave evidence on 18 July. She said: *The main problem is that the regulatory investment test for transmission doesn't include the environmental externalities—all the external costs—and the Australian Energy Infrastructure Commissioner has said that the rules of the market are not fit for purpose. So there's a real*	SEARs, the requirements of the *Environmental Planning & Assessment Act 1979* and *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth), the Environmental Planning and Assessment Regulation 2021, and the *State Significant Infrastructure Guidelines*. The EIS details the project, its potential environmental, social and economic impacts and benefits, and how these impacts would be avoided, minimised and managed throughout construction and operation. The approach for the RIT-T and assessment of the project as described in the EIS, therefore comprehensively considers environment, social, engineering and cost factors.

	problem. The New South Wales Government requires environmental externalities—the environmental and community costs—to be taken into account for projects that cost more than $10 million. These transmission companies are building projects that are worth billions of dollars and aren't taking into account the environmental and community costs. I'm sorry. That was quite long. Just take that statement as an expression of this broad proposition. Would you agree that the regulatory test somehow excludes these environmental and community costs? MARIE JORDAN: I don't believe they exclude the cost. Those are all in for the costs that we have. But	

	I think there are factors that people would like considered, associated with community benefits and things like that. Our costs are all part of the RIT-T. I might be walking down a path and I'm not understanding what that specific comment was, but I'm thinking it might be really to take into account non-monetary things—impacts to community and things like that. But we can look up that specific question and take it on notice to make sure that I've understood what was trying to be conveyed	
12.	The Hon. EMMA HURST: I want to touch on the key concern that was raised by Wagga council regarding acquiring the 1.8-kilometre waste facility in the area. The council considered it a valuable asset, and they argued strongly that it	Transgrid undertook an extensive corridor analysis to identify a preferred alignment for EnergyConnect as part of the environmental assessment process. This is detailed in the EIS, which is publicly available. In determining the preferred alignment and to minimise environmental impacts from the new transmission line, which included impacts on properties, Transgrid considered a number of factors, including the preference to have an alignment which either ran parallel or was within (in whole or part) existing easement corridors. Gregadoo Waste Facility was already hosting an easement for transmission lines. Accordingly, by acquiring the easement at Gregadoo that ran parallel to the existing easement, Transgrid has sought to minimise the impact of the new transmission line.

	shouldn't be included in the HumeLink. Can you explain why the decision was made over the objection of the council and others in the community to continue as is? JEREMY ROBERTS: I believe that was on the Project EnergyConnect project, not HumeLink, that waste facility. We are bound to follow the just terms requirements and have an independent valuer assess the value of the land, and follow those requirements, rather than go off potentially what someone else thinks the land is worth. We have to follow the requirements of the regulator, and that's where we've come to our	Transgrid did investigate engineering options for the Gregadoo site, however due to significant cost and construction delays that would be required, the option was not feasible. Transgrid has engaged extensively with Wagga Wagga City Council, however as the Council is appealing the compensation claim in the Court we are unable to comment on this matter. However, we note in the Inquiry's Tumut hearing, Council advised the Committee they valued their compensation claim at over $58 million, and the Valuer General has determined the amount to be $1.2 million.

	assessment, taking into account use of the land into that assessment. The Hon. EMMA HURST: What was the difference between how it was valued through Transgrid versus the council? JEREMY ROBERTS: I will come back to you on that one.	
13	Ms CATE FAEHRMANN: Thanks for reappearing before this Committee. Just going back to the questions asked by my colleague from the crossbench here, you've surveyed 70 per cent. You're saying if you get access to the 30 per cent—what do you mean if you get access?	Currently Transgrid has Consents to Enter for approximately 249.9km of the total alignment of 328km or 76% of the line. Approximately 40.747km of this is public land or approximately 16% of the 249.9km where we have Consents to Enter.

	JEREMY ROBERTS: If that happened during the public exhibition process, we'll take it onboard there; otherwise, it'll be further into the compulsory acquisition process if we had to go down that route. We're continuing to try to get consent to enter throughout the whole route and as soon as we can get consent to enter, we can undertake the survey and walk the route to do that final assessment. But in the interim we've had to assume that there is presence of what's expected of species in those areas. Ms CATE FAEHRMANN: You have 70 per cent. You've surveyed 70 per cent.	

	JEREMY ROBERTS: Yes. Ms CATE FAEHRMANN: You've walked that line of the entire—sorry, what's the length of it again? JEREMY ROBERTS: Three-sixty kilometres. Ms CATE FAEHRMANN: So you're saying that a third of that 360 kilometres—120 kilometres; is that right?—you haven't been able to survey. Is that correct? JEREMY ROBERTS: I'll come back on the exact— Ms CATE FAEHRMANN: Because landholders won't let you onto their property because they're in opposition. Is that what you're referring to? JEREMY ROBERTS: I'll come back to the exact kilometres	

	amounts; but, yes, we've done 70 per cent of the route, where the other 30 per cent have not allowed access. Ms CATE FAEHRMANN: How much of that 70 per cent is through public land? JEREMY ROBERTS: I'll have to confirm. Ms CATE FAEHRMANN: Is it a significant number, then, of the 30 per cent? Is that a significant number of the total quantity of private land that you need to build the transmission line on that you've been refused access? JEREMY ROBERTS: I'll come back on the exact what was private versus public of that 70 per cent versus 30 per cent of where	

	we've assessed it.	
14.	Ms CATE FAEHRMANN: What's factored in? What is that factored in by? What month? After the public exhibition at the end of this year, you'll continue working with landholders, but what have you factored in in terms of when you pull trying to get agreement and you start going on to compulsorily acquire? What time frame have you given that? Three months? Six months? JEREMY ROBERTS: Ideally, we're aiming to have all land available for access for construction by mid to late next year, or late next year. I'll come back with some actual dates of the land acquisition process.	The NSW Land Acquisition (Just Terms Compensation) Act 1991 (Just Terms Act) provides a pathway for Transgrid to gain access to land, where landowners refuse access or refuse to agree to grant Transgrid an easement. There are timeframes specified in the Just Terms Act, as follows: At least 6 months of negotiations with landholder prior to the commencement of the formal compulsory acquisition period (with some limited exceptions, eg. acquisitions of Crown Land); Where agreement is not reached with a landholder within the 6-month pre-acquisition period, a PAN is served on the landholder; A period of 90 days from service of the PAN applies, before Transgrid can proceed to seek gazettal of an acquisition notice; The acquisition notice must be gazetted within 120 days of the PAN being given (unless the landowners agree to extend); The easement is granted to Transgrid on gazettal of the acquisition notice; Written notice of the acquisition, entitlement to compensation and the amount of compensation offered is given to the landholder in a compensation notice; The amount of compensation offered in the compensation notice is determined by the Valuer-General – the statutory period is 45 days after gazettal (although, in practice, the Valuer-General often takes a longer period of time); The amount of compensation offered is deemed to have been accepted within 90 days of giving the compensation notice unless landowner advises otherwise; Payment of either all the compensation assessed or an advance payment of 90% of amount of compensation offered by Transgrid to the landholders or into trust must be made before the landholder is required to grant access to the easement land; In addition, where residences are impacted by the acquisition landholders are entitled to remain in occupation of any building which is the person's principal place of residence or place of business for 3 months after acquisition, even if all or part of the compensation has been paid to the landowner or into trust. However, the Minister can

	Ms CATE FAEHRMANN: Available for construction or surveying, just to be clear? JEREMY ROBERTS: Survey has to happen for construction. Ms CATE FAEHRMANN: Yes. JEREMY ROBERTS: I'll come back with exact dates on that.	approve immediate vacant possession if satisfied that the authority requires this. At specific stages, steps in the compulsory acquisition process are undertaken and controlled by parties, such as Ministerial decisions to issue PANs, and Transgrid has no control over the timeframes within which these steps are taken and completed. In the event, that a landholder locks out Transgrid from their property, notwithstanding Transgrid having a right of access via an easement obtained by compulsory acquisition process, Transgrid may be able to: Seek to enforce its rights under the easement in Court; Gain access under its powers in the Electricity Supply Act, 1995; or Seek the NSW Sheriff's Office assistance to enforce access. However, Transgrid's priority is to continue to engage with landowners to negotiate an agreement.
15.	Ms CATE FAEHRMANN: Okay. Moving on to Snowy 2.0, was there a reason why, in the original submission that Transgrid made to this inquiry, the delay to Snowy 2.0 was labelled as potential delay? JEREMY ROBERTS: To Snowy 2.0, Snowy Hydro's project?	In May 2023 Snowy Hydro announced that Snowy 2.0 completion date would be delayed until approximately 2028.

	Ms CATE FAEHRMANN: Yes. JEREMY ROBERTS: I'm not sure why the potential was there rather than actual delay. Ms CATE FAEHRMANN: Because it is an actual delay, isn't it? JEREMY ROBERTS: My understanding is that it is, but I'll take that on notice and come back. My understanding is that it is a real delay. Ms CATE FAEHRMANN: With respect, Mr Roberts, surely it is something that you would be—this is your business, much more than it is mine, and I found that out pretty easily. JEREMY ROBERTS: Yes. Ms CATE FAEHRMANN: It's 2029 at least,	

	isn't it? Ms Jordan? MARIE JORDAN: Yes, I would be happy to answer that. We do realise it's delayed. We do not have a final date. We have interest in HumeLink for a broad variety of uses. Snowy 2.0 is one connection into a much larger scheme. When we run our power flow studies and when we look at—we're releasing our transmission annual planning report this month. When we look at that, we did take into account Snowy's delay. But when you look at the whole system, back to, it's one piece of the puzzle. It's clear in the report, and also in the ISP, that it is much broader than Snowy 2.0.	
16.	Ms CATE FAEHRMANN: How much is the commitment Transgrid has	Transgrid has committed approximately $334 million in procurement for long lead specialised equipment including transformers, reactors, conductors and contractor costs.

	made financially for those early works? When you're saying you haven't quite signed the contracts but you would know what that is costing, how much is that? JEREMY ROBERTS: Over the early works phase, that will be roughly $50 million per contractor, and there are two contractors. Ms CATE FAEHRMANN: Has anything else beyond that been committed in terms of the project and expenditure? JEREMY ROBERTS: Yes. As I previously stated, we've ordered transformers and reactors, we're very close to ordering a conductor and we'll also start to procure some of	

	the early steel manufacture for the towers as well. Ms CATE FAEHRMANN: And how much is all of that again? Excuse me, if you said you have already mentioned it. JEREMY ROBERTS: Yes. I would have to come back with how much that's all costing in total.	