Santos Limited

Santos NSW (Eastern) Pty Ltd

Narrabri Gas Project (SSD 6456)

Opinion – Issues raised in IPC public hearing

7 August 2020

1. My instructing solicitors, Corrs Chambers Westgarth, act for Santos NSW (Eastern) Pty Ltd (**Santos**), which is the proponent of the Narrabri Gas Project (**Project**).

2. On 3 March 2020, the Minister for Planning and Public Spaces, The Hon Rob Stokes MP (**Minister**) made a request to the Independent Planning Commission (**IPC**) to conduct a public hearing into the carrying out of the Project prior to determining the State Significant Development (**SSD**) application for the Project, paying particular attention to (a) the assessment report of the Department of Planning, Industry and Environment (**DPIE**) dated June 2020 regarding the SSD application (**Assessment Report**); (b) key issues raised in public submissions during the public hearing; and (c) any other relevant documents or information.

3. The IPC has recently completed the public hearing, which was held on various days between 20 July 2020 and 1 August 2020. I have been asked to advise on a number of specific issues raised in the course of the public hearing, in particular the meaning and application of the principles of ecologically sustainable development (**ESD**); and the interpretation of clause 14 of the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* (**Mining SEPP**).

4. Specifically, I am asked to advise on the following matters:

   (a) the consequence of the absence of express reference to the principles of ESD in the Assessment Report;

   (b) some of the contentions advanced in objector submissions dated 16 July 2020 made on behalf of the North West Alliance (**NWA Submission**) in respect of the application of the principles of ESD, in particular the proper application of:

   (i) the precautionary principle in relation to groundwater and ecological impacts; and

   (ii) the principles of "inter-generational equity" and "intra-generational equity" in relation to climate change and social and economic impacts;

   (c) the contention advanced in the NWA Submission about the Minister's "*Statement of Expectations for the Independent Planning Commission*" (applicable for the period from 1 May 2020 to 30 June 2021) and procedural fairness to the NWA;

   (d) the operation of clause 14 of the Mining SEPP; and

   (e) the submissions made during the public hearing to the effect that the SSD application must be refused as the Project has no "*social licence*", having regard to the matters that the IPC must consider under section 4.15 of the *Environmental Planning and Assessment Act 1979* (NSW) (**EP&A Act**).

Background

5. My instructing solicitors have informed me of the following background facts.

6. The Project is a joint venture between Santos NSW (Eastern) Pty Ltd (80%) and EnergyAustralia Narrabri Gas Pty Ltd (20%). Santos NSW (Eastern) Pty Ltd, a wholly owned subsidiary of Santos Limited, is the proponent of the SSD application and proposed operator of the Project.

7. Santos proposes to develop a new coal seam gas (**CSG**) field and associated infrastructure over 95,000 hectares in north-western NSW near Narrabri. This will involve the progressive installation of up to 850 gas wells on up to 425 well pads over approximately 20 years and the construction and operation of gas processing and water treatment facilities. While the Project area will cover about 95,000 ha, the Project footprint would directly impact about one per cent of that area (that is, up to 1,000 ha of cleared land).

8. The Project has the potential to produce up to 200 terajoules of natural gas per day for the domestic gas market over a period of at least 20 years. This would meet approximately 50% of NSW's gas demand.

9. The Project has been identified as a Strategic Energy Project in the NSW Gas Plan.

10. About two thirds of the Project site is located within the Pilliga State Forest, with the balance of the site situated on privately-owned agricultural land to the north of the Forest.

11. Currently there are approximately 70 gas wells and associated infrastructure installed within the Project area that have been used for exploratory purposes since the early 2000s.

Project Status

12. On 1 February 2017, Santos lodged State Significant Development application SSD-6456 (**SSD Application**) and the requisite Environmental Impact Statement (**EIS**) with the DPIE.

13. The SSD Application has been under assessment for over 3 years. Over 23,000 public submissions were received by the DPIE in relation to the SSD Application during this period.

14. On 11 June 2020, DPIE released its Assessment Report, which recommended approval of the SSD Application. Appendix I to the Assessment Report contains the draft recommended conditions of consent (**Recommended Conditions**).

15. As there were more than 50 unique public objections to the SSD Application,[1] the IPC was declared to be the consent authority for the SSD Application under section 4.5(a) of the EP&AAct. The SSD Application was referred to the IPC for determination on 11 June 2020.

16. The Project was also declared to be a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (**EPBC Act**) on 1 December 2014. A decision under the EPBC Act is expected to be made following the determination of the SSD Application by the IPC.

The public hearing

17. Following a request by the Minister under section 2.9(1)(d) of the EP&A Act, the Project was the subject of a public hearing that took place between 20-24 July and on 1 August 2020. The commissioners (Mr Steve O'Connor (Chair), Professor Snow Barlow and Mr John Hann) and counsel assisting the IPC (Richard Beasley SC) conducted the public hearing by telephone and video conference. Over 400 people registered to speak at the public hearing and numerous written submissions were made, including the NWA submission referred to above.

18. My instructing solicitors have drawn attention specifically to the following passages in the transcript of the public hearing, in particular to give context for the first question that I am asked to address in this opinion.

19. At the opening of the public hearing, Mr David Kitto on behalf of the DPIE presented an outline of the Assessment Report to the IPC and made a number of statements regarding the application of the precautionary principle to the Project, following questions by counsel assisting,[2] in which the application of ESD to the Project was discussed.

20. The exchange between Mr Beasley SC and Mr Kitto is quite lengthy so I do not set it out here, but I note that Mr Beasley put a series of propositions to Mr Kitto to clarify the way in which the principles of ESD had been applied to the Project. Some of the relevant considerations identified in this exchange include: the "natural reasons…the coal seam from which the gas is going to be extracted is a long way below the freshwater aquifers";[3] "the aquitards…the rock that…separates the – [sic] as a barrier between the freshwater and the coal seam";[4] "it's a seismically stable area";[5] "conditions";[6] "knowledge of the

1 Cl. 8A(1)(b) of the *State Environmental Planning Policy (State and Regional Development) 2011*.
2 Transcript, Day 1, P-18, line 18 through to P-23, line 10.
3 Transcript, Day 1, P-19, lines 36-38.
4 Transcript, Day 1, P-19, lines 43-44.
5 Transcript, Day 1, P-20, lines 1-2.
6 Transcript, Day 1, P-20, line 7.

geological architecture" (with the exchange discussing knowledge of faults or structures at a regional scale as against local faults and structures);[7] "the field development protocol and field development plan";[8] the phasing of the development;[9] "monitoring and the fact that it's independent monitoring at times";[10] and "other precautions in the conditions".[11]

21. Mr Kitto also made the following statement about the phasing of the development in relation to groundwater impacts:

> *And it's a critical way of dealing with uncertainty and bringing in a whole lot of new information over time in a progressive way to deal with and manage any risks. But, fundamentally, as you pointed out earlier, I think what the Water Expert Panel and a lot of other experts have pointed out to us is that we are talking about localised uncertainties and risks, not uncertainties at a broad regional level that would lead to fundamental, you know, significant and irreversible harm. So if you go to the precautionary principle and you take the two strands that, you know, Judge Preston has outlined there, it's – you first need to establish that there will be significant and irreversible harm…*[12]
>
> *… in our view, we don't think the precautionary principle is triggered in this instance, and, you know, a lot of – a lot of the reasons why are probably best spelled out in the Water Expert's Panel's report, attached to our report and we've really summarised a lot of the findings from that expert advice in our assessment report.*[13]

22. Then there is the following exchange between the Chair and Mr Kitto:[14]

> *MR O'CONNOR: Okay. Just a question following on from Richard's discussion with you moments ago about the precautionary principle. Looking through the department's assessment report, I'm struggling to find where the ESD principles – the ecologically sustainable development principles – have been addressed by the department. Can you lead me to where that's given some consideration?*
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> *MR KITTO: So I – I mean, the principles of – I mean, the principles of ESD as they're defined in New South Wales are the effective integration of economic, social and environmental factors. And our view is that the whole report is really*

[7] Transcript, Day 1, P-20, lines 18-39.
[8] Transcript, Day 1, P-21, lines 5-25.
[9] Transcript, Day 1, P-21, lines 34-35.
[10] Transcript, Day 1, P-22, line 46.
[11] Transcript, Day 1, P-21, lines 41-44.
[12] Transcript, Day 1, P-21, lines 46-47 and P-22, lines 1-7.
[13] Transcript, Day 1, P-22, lines 30-34.
[14] Transcript, Day 1, P-22, lines 34-46.

an attempt to integrate those aspects and, you know, ESD, you know, is not something that you can point and say it's in paragraphs 3, 4 and 5. It really is the whole report. Just – you know, and we're fully aware that, you know, under the public interest – the requirements to consider the public interest, that imports the objects of the Act.

23. Mr Kitto also stated:

> *And, you know, ESD is certainly one of the objects of the Act but there are also – you know, it's one of six objects that are relevant to the consideration of the project, and we haven't gone about the, you know, proper use of various – you know, all those other objectives. So, you know, we're quite happy to provide a very simple version of it but, as I said, our view is our whole report is about the effective integration of economic, social and environmental factors into decision-making. In terms of the principles of ESD, you know, the legislation does single out, you know, the precautionary principle as a potential way of achieving ESD.*[15]
>
> *You know, in our view, you know, there's two limbs to that under case law and, in our view, we have – none of our assessment has identified any potential significant or irreversible harm that would result from the project. And, in our view, the project does not trigger the precautionary principle. In terms of intergenerational equity, I think our assessment makes it clear that there are unlikely to be any significant impacts on people or the environment, and certainly there would be no – you know, the ability for the environment – you know, the future generation to be able to benefit and use the natural resources, and the environment in that area would not be compromised by the Narrabri Gas Project.*[16]

24. I note that a further exchange between counsel assisting and Mr Kitto on the topic of the precautionary principle occurred on Day 7 of the public hearing, which I have read and considered. It appears to me that the DPIE has consistently expressed the view, based on the materials that they identify and the reasoning set out in the Assessment Report, that the precautionary principle is not engaged in relation to groundwater, ecological impacts or otherwise, since there is no apparent significant risk of harm. Mr Kitto also addressed an alternative submission to the IPC, to the effect that assuming that the precautionary principle had been triggered, then adaptive management is an appropriate response to the identification of that risk, since the threat of harm is low or very low and the Project will advance incrementally.

15 Transcript Day 1, P-23, lines 1-9.

16 Transcript, Day 1, P-25, lines 10-20.

Advice

25. My opinion on the five topics raised for advice is as follows.

(a) The consequence of the absence of express reference to the principles of ESD in the Assessment Report

26. I am instructed that on a number of occasions during the public hearing, objectors contended that the IPC should draw an adverse inference from the absence of express references to the term "*ecologically sustainable development*" in the Assessment Report, the inference being that the DPIE had not considered or applied the principles of ESD; and the further inference being that there is thereby some legal defect in the report.

27. One of the 10 objects of the EP&A Act refers to ESD. The object set out in s 1.3(b) is:

> (b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment.

28. The term "*ecologically sustainable development*" is defined in s 4 of the EP&A Act to have the same meaning it has in s 6(2) of the *Protection of the Environment Administration Act 1991,* which provides:

> *(2) For the purposes of subsection (1) (a), ecologically sustainable development requires the effective integration of social, economic and environmental considerations in decision-making processes. Ecologically sustainable development can be achieved through the implementation of the following principles and programs:*
>
> *(a) the precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.*
>
> *In the application of the precautionary principle, public and private decisions should be guided by:*
>
> *(i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and*
>
> *(ii) an assessment of the risk-weighted consequences of various options,*
>
> *(b) inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,*
>
> *(c) conservation of biological diversity and ecological integrity—namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,*

(d) improved valuation, pricing and incentive mechanisms—namely, that environmental factors should be included in the valuation of assets and services, such as:

(i) polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,

(ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,

(iii) environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.

29. In respect of State Significant Development, s 4.40 of the EP&A Act provides that s 4.15 applies (subject to Division 4.7) to the determination of a development application. Section 4.15(1) sets out the familiar list, requiring consideration of such of the listed matters as are of relevance to the development the subject of the development application.

30. The principles of ESD are not a listed matter in s 4.15(1). However, the Land and Environment Court has indicated that the requirement to consider the "*public interest*" picks up aspects of the principles of ESD relevant to the circumstances of a particular development application. In *Upper Mooki Landcare Inc v Shenhua Watermark Coal Pty Ltd and Minister for Planning* [2016] NSWLEC 6, (2016) 216 LGERA 40 at [178], Preston CJ of LEC held that the former Planning Asssessment Commission (**PAC**) was obliged to take into consideration the relevant matters of the precautionary principle and the principle of conservation of biological diversity and ecological integrity – that obligation "*arose as part of the required consideration of the public interest*". The relevant ground of challenge to the PAC's approval of the Watermark Coal Project in that case failed because "*PAC's obligation to consider these two principles of ESD did not demand consideration at the level of particularity and in the precise manner argued by the applicant in this ground of challenge*" (at [180]) and, in any event, the PAC had in substance considered the necessary matters (at [181]-[182]).

31. Nevertheless, proceeding on the basis that there is a generally applicable obligation to consider relevant principles of ecologically sustainable development, in my opinion it is not necessary to mention specifically the term ecololgically sustainable development or recite the specific text of the definition of that term in the determination of an application, let alone in an assessment report considering the application.

32. In *Drake-Brockmann v Minister for Planning* [2007] NSWLEC 490, (2007) 158 LGERA 349 at [132(7)], Jagot J said (making an assumption that the former Part 3A of the EP&A

Act obliged the Minister to consider the principles of ecologically sustainable development where relevant to the particular project) that:

> *In this context it was open to the Director-General to observe that his entire report generally represented an assessment of ecologically sustainable development. It was open to the Director-General to conclude that the project was consistent with the principles of ecologically sustainable development. It was open to the Minister to accept those conclusions. In so doing, the Minister considered ecologically sustainable development and its principles and programs as relevant to the project. The Director-General did not need to specifically mention the two principles and programs relied on by the applicant (the precautionary principle and inter-generational equity) to enable the Minister to consider those principles and programs and ecologically sustainable development generally.*

33. That paragraph was approved in *Haughton v Minister for Planning* [2011] NSWLEC 217, (2011) 185 LGERA 373 at [166]. Further, in *Minister for Planning v Walker* [2008] NSWCA 224, (2008) 161 LGERA 423 at [59], the Court of Appeal indicated that consideration of the principles of ESD does not require explicit formulation of issues in the terms of the four principles and programs specified in the definition of ESD.

34. Accordingly, in my opinion, assuming that the underlying fact in the question for advice is correct – that there is not any express reference to the term"*ecologically sustainable development*" in the body of the Assessment Report – in my opinion that fact does not have any material consequence. The relevant question, and the relevant obligation that is placed upon the consent authority in the determination of the development application, is to engage with the substance of the principles of ESD.

35. There can be no doubt from the exchanges set out above that Mr Kitto considers that the DPIE addressed and applied the substance of the principles of ESD in the course of its assessment of the Project. Having reviewed the Assessment Report, I consider that to be correct. In my opinion, there is evident objective support for that conclusion in the range of matters considered in the Assessment Report and the Recommended Conditions.

36. Three related points may be noted.

37. First, as Mr Kitto noted during the public hearing,[17] the Assessment Report also does not explicitly mention any of the other nine objects of the EP&A Act, despite their relevance to the assessment engaged in by the DPIE throughout the Assessment Report. In my view, as with the object of the EP&A Act that refers to ESD, it would be formalistic and wrong to insist on the use of specific terms or specific text in the preparation of an

[17] Transcript, Day 1, P-25, lines 1-4.

assessment report. It is sufficient if the DPIE (and the consent authority in due course) engages with the substance of the relevant principles.

38. Secondly, the requirement upon the consent authority to have regard to the public interest must be applied having regard to the scope and purpose of the EP&A Act.[18] There is no basis to assert that a single object of the EP&A Act, such as the principles of ESD, should be given any greater weight than the other objects. There is no "hierarchy" of objects to be observed or applied.[19] The two objects referred to in paragraph 25 of the NWA Submission are part only of the purpose of the EP&A Act and, in my opinion, it would be wrong to limit consideration to those two objects or otherwise adopt a process of assessment by which two of the ten objects of the EP&A Act are given dispropritionate weight.

39. Thirdly, the statutory expression of the object that refers to ESD, in s 1.3(b) of the EP&A Act, carries its own very generally expressed guide to achieving ESD – the object is to facilitate ESD "by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment". As Pepper J held in *Barrington - Gloucester - Stroud Preservation Alliance Inc v Minister for Planning and Infrastructure* [2012] NSWLEC 197, (2012) 194 LGERA 113 at [174]:

> … the level of generality at which these principles are considered does not, in my view, mandate any particular method of analysis nor the outcome that should result from any consideration (*Drake-Brockman* at [132(2)]). Thus descent to a direct application of the principles to each and every condition imposed in the approval is not required.

[18] *Patra Holdings Pty Ltd v Minister for Land and Water Conservation* [2001] NSWLEC 265, (2001) 119 LGERA 231 at [9], [11].

[19] *Drake-Brockman v Minister for Planning* [2007] NSWLEC 490, (2007) 158 LGERA 349 at [127].

(b)(i) The precautionary principle in relation to groundwater and ecological impacts

40. As I have noted in paragraph 30, there is authority that the principles of ESD (where issues relevant to those principles apply) are relevant matters for consideration as part of the 'public interest' that are required to be considered under s 4.15(1)(e) of the EP&A Act. See also *Telstra Corporation Ltd v Hornsby Shire Council* [2006] NSWLEC 133, (2006) 67 NSWLR 256 at [123] (***Telstra***); *Minister for Planning v Walker* [2008] NSWCA 224, (2008) 161 LGERA 423 at [42]-[43] (***Walker***).

41. The precautionary principle is one of the principles of ESD.[20] It is triggered where:

    (a) there is a threat of serious or irreversible environmental damage; and

    (b) scientific uncertainty as to the environmental damage (*Telstra*).

42. These thresholds are cumulative, in that each must be satisfied before the precautionary principle is invoked.

43. In applying the 'scientific uncertainty' test, Preston CJ of LEC in *Telstra* clarifies that complete certainty is an "*unattainable goal*" and therefore unrealistic. Accordingly, where scientific uncertainty exists:

    (a) the evidence of serious or irreversible harm;

    (b) the degree of that uncertainty; and

    (c) the steps proposed to be taken that can be reasonably taken to reduce or mitigate that uncertainty,

    must be considered.[21]

44. In my opinion, those propositions highlight a crucial omission from the NWA submission, which is the consideration of (c) above. Where full scientific certainty cannot be achieved, the precautionary principle does not prohibit granting consent to the project until certainty has been obtained.[22]

45. Adaptive management is an accepted and appropriate approach to managing scientific uncertainty, particularly when associated with potential groundwater impacts where the regional groundwater conditions are well understood.[23] In my opinion, in circumstances

20 Section 6(2)(a) of the *Protection of the Environment Administration Act 1991* (NSW).

21 *Telstra* at [141].

22 *Telstra* at [179]-[181].

23 Adaptive management regimes are regularly approved and regularly pass muster in the Courts. See, for example, *Barrington-Gloucester-Stroud Preservation Alliance Inc v Minister for Planning and*

in which an adaptive management regime is proposed to reduce or mitigate areas of scientific uncertainty, it is incumbent upon the consent authority to consider that regime when assessing an allegation that the proposed development is inconsistent with the precautionary principle. That obligation is explicity stated in *Telstra* at [141].

46. In *Newcastle & Hunter Valley Speleological Society Inc v Upper Hunter Shire Council and Stoneco Pty Limited* [2010] NSWLEC 48, (2010) 210 LGERA 126 (**Speleological Society**), the Court acknowledged that, in general, the imposition of an adaptive management regime as a way of managing the risks of significant environmental harm is accepted as appropriate (at [185]). At [184], Preston CJ of the LEC stated [emphasis added]:

> *Adaptive management is a concept which is frequently invoked but less often implemented in practice.* ***Adaptive management is not a "suck it and see", trial and error approach to management, but it is an iterative approach involving explicit testing of the achievement of defined goals****. Through feedback to the management process, the management procedures are changed in steps until monitoring shows that the desired outcome is obtained.* ***The monitoring program has to be designed so that there is statistical confidence in the outcome****.* ***In adaptive management the goal to be achieved is set, so there is no uncertainty as to the outcome and conditions requiring adaptive management do not lack certainty, but rather they establish a regime which would permit changes, within defined parameters, to the way the outcome is achieved****.*

47. I note that there have been a number of cases in the Land and Environment Court that have considered scientific uncertainty in relation to groundwater impacts.[24]

48. In *Hunter Environment Lobby Inc v Minister for Planning and Infrastructure (No 2)* [2014] NSWLEC 129, involving an objector appeal against a decision of the PAC to approve an open-cut coal mine, Pain J held that:

    (a) an adaptive management regime was capable of adequately addressing the impacts of the expansion on groundwater supplies (at [188]); and

Infrastructure [2012] NSWLEC 197, (2012) 194 LGERA 113; *Hunter Environment Lobby Inc v Minister for Planning and Infrastructure (No 2)* [2014] NSWLEC 129*; Upper Mooki Landcare Inc v Shenhua Watermark Coal Pty Ltd and Minister for Planning* [2016] NSWLEC 6, (2016) 216 LGERA 40; *Port Stephens Pearls Pty Ltd v Minister for Infrastructure and Planning* [2005] NSWLEC 426; *Tuna Boat Owners Association of SA Inc v Development Assessment Commission* (2000) 77 SASR 369.

[24] *Barrington-Gloucester-Stroud Preservation Alliance Inc v Minister for Planning and Infrastructure* [2012] NSWLEC 197, (2012) 194 LGERA 113; *SHCAG Pty Ltd v Minister for Planning and Infrastructure* [2013] NSWLEC 1032; *Hunter Environment Lobby Inc v Minister for Planning and Infrastructure (No 2)* [2014] NSWLEC 129.

(b) the precautionary principle does not require a zero risk approach, rather it requires a proportionate response, which can be achieved through appropriate conditions of consent, including, in that case, the adaptive management regime that was to be adopted (at [261]).

49. Of course, an adaptive management approach may be done well or it may be done poorly, and it may not always be an appropriate response to potential groundwater impacts in particular circumstances. In *SHCAG Pty Ltd v Minister for Planning and Infrastructure* [2013] NSWLEC 1032 (***SHCAG***), the Court in Class 1 proceedings found risks of groundwater contamination would not be adequately mitigated by the proposed adaptive management approach, which included a requirement to prepare and implement a water management plan as a condition of the approval.

50. Prior to the merit appeal in *SHCAG*, the Director-General's Environmental Assessment Report noted that the proponent had made various assumptions about present groundwater conditions, but that there was an "*absence of actual monitoring data to calibrate and confirm these assumptions [which] means that Boral's position cannot yet be confirmed*" (*SHCAG* at [69]). On appeal, the Court found that an adaptive management regime was inappropriate in circumstances where there were significant uncertainties and undefined parameters due to a lack of baseline data on water quality issues (at [86]). In other words, the proposed regime did not meet the test in *Speleological Society*.

51. In the present circumstances, the NWA Submission states that the IPC should engage the precautionary principle and refuse consent to the Project on the basis that "*there are risks of serious and irreversible environmental harm and a lack of scientific uncertainty as to that harm, particularly in relation to water impacts, and the proponent has failed to properly establish the environmental consequences, particularly in relation to water resources*".[25] Oral submissions made by subject-matter experts on behalf of the NWA on Day 4 of the public hearing were to the same effect. However, so far as I am aware, with the possible exceptions set out below, no attempt has been made in the NWA submissions on this topic to address the proposed adaptive management regimes, let alone to attempt to demonstrate any deficiency in the proposed steps to be taken to reduce or mitigate the scientific uncertainty.

52. With respect to those experts who presented their opinions to the IPC in support of the NWA submissions (as they are listed in paragraph 6 of the NWA Submission), this omission seems to have occurred persistently throughout all or most of the submissions of those technical experts. On the basis of the materials that I have reviewed, I have not

25 NWA Submission at [41].

identified in any of those expert submissions an engagement with, and discussion of the effect of, the adaptive management regimes proposed in the EIS, assessed by the DPIE in the Assessment Report or reflected in the Recommended Conditions, with the possible following exceptions:

(a) The submission of Dr Ziller on social impacts. This submission suggests that the fact that the Social Impact Management Plan is required to "identify" social impacts, indicates that such impacts have not been assessed and that there are information gaps that do not facilitate an "adaptive management" approach to social impacts via the imposition of a condition requiring a Social Impact Management Plan. I note that this submission does not refer to paragraphs 556-595 of the DPIE Assessment Report, which indicate that consideration has been given to social impacts and that the intention in requiring the Social Impact Management Plan is to identify and document such social impacts so that they can be monitored to facilitate a responsive approach to those impacts over time.

(b) The submission of Matthew Currell on groundwater, which raises concerns regarding the adequacy of information to facilitate the adaptive management approach to groundwater impacts. That submission would need to be addressed in the context of consideration of the findings of the Water Expert Panel, GISERA and the IESC.

53. I turn now to consider some of the specific areas of concern addressed in the public hearing, in the context of considering the application of the precautionary principle.

Groundwater

54. The NWA Submission sets out various groundwater and surface water risks presented by CSG related activities.

55. The anticipated groundwater and surface water impacts of the Project have been reviewed in detail by the DPIE in the Assessment Report.

56. I am instructed that anticipated groundwater and surface water impacts of the Project have also been assessed over a number of years by three separate independent expert bodies, namely the:

(a) CSIRO (GISERA);

(b) Water Expert Panel; and

(c) Commonwealth Independent Expert Scientific Committee;

each of which has determined that the Project would not have a significant impact on groundwater and surface water having regard to the proposed comprehensive suite of conditions to be imposed on the Project.

57. I have been asked to consider whether, assuming that the following statements provide an accurate description of the substance of the SSD application in relation to groundwater, it is open to the IPC to consider that the proposed monitoring and adaptive management approach for the Project meets the description in *Speleological Society*:

(a) the potential impacts to groundwater sources have been rigorously assessed and found to be negligible. The model used to predict future impacts has been described as "world class" and "fit for purpose" by an independent peer review conducted by CSIRO. It will continue to be enhanced with further field monitoring data;

(b) although some level of uncertainty will always remain with respect to the modelling of groundwater impacts, an "adaptive management" approach has been adopted, as is widely accepted for resources projects, whereby there will be ongoing monitoring of water levels and pressures and water quality via a Water Management Plan;

(c) the baseline conditions are known to the extent that they can be through the groundwater model,[26] which will be continuously updated;

(d) remaining knowledge gaps can only be closed out by commencing the Project, updates to the groundwater model and through implementation of the Water Management Plan.[27] In addition, the water management performance measures prescribe performance measures for water impacts and on the aquifers, riparian and aquatic ecosystems, well integrity, produced water, irrigation and beneficial reuse management, Bohena Creek water discharges, salt management and chemical and hydrocarbon storage,[28] and through the collection of ongoing monitoring data;

(e) the Water Management Plan (which includes multiple sub-plans dealing with all aspects of water management) is to be developed in consultation with several key agencies and stakeholders and approved by the Planning Secretary. It incorporates an early detection system to ensure that any changes in groundwater which were not predicted are actioned well before there are any impacts to water users; and

(f) a Water Technical Advisory Group is being established to provide ongoing advice on all aspects of the project water-related management issues, including the groundwater model, Water Management Plan and the Field Development Plan.[29]

58. In my opinion, on the basis that the propositions set out above accurately reflect the facts, it is well open to the IPC to consider that the proposed monitoring and adaptive

26 Assessment Report, at [286]-[293], summarising the key findings of the Water Expert Panel.

27 Recommended Conditions, B37 and B38.

28 Recommended Conditions, B35.

29 Recommended Conditions, B36.

management approach for the Project meets the description in *Speleological Society*. To the extent that 'knowledge gaps' existed when the EIS was first prepared, and exist today, in relation to impacts on groundwater, on that basis I consider that it is open to the IPC to determine that it is appropriate for these to be dealt with as part of an adaptive management approach.

Ecological Impacts

59. The NWA Submission raises a series of concerns regarding the adequacy of the environmental assessment in relation to ecological impacts and cites concerns regarding deficiencies in the impact assessment.[30] The NWA Submission says that "uncertainty about the location of gas infrastructure as well as the scale of direct and indirect impacts has made a transparent assessment of the biodiversity impacts of this Project impossible".[31] For this reason, it is said that the precautionary principle is engaged and should be applied to refuse the SSD application.[32]

60. In my opinion, as with the groundwater issues, the NWA Submission identifies a range of potential impacts on ecological matters,[33] but does not also identify that those matters are the subject of proposed mechanisms to reduce or mitigate the feared harm.

61. A compliant assessment of the proposal requires attention to the mitigation measures that have been proposed and those that are required to be implemented by way of inclusion in the Recommended Conditions.

62. It is no part of this opinion to purport to carry out that assessment. However, in my opinion, it is critical to such an assessment to engage with the adaptive management regime that has been established to address the inevitable scientific uncertainty arising from a Project where the precise location of surface infrastructure is unknown and is guided by progressive exploration, appraisal and development. As one example among many, the proposed conditions of consent contain a requirement to prepare and implement a Field Development Protocol to dictate the siting of gas well infrastructure,[34] which is to occur in the context of the location and character of the Project area within the broader ecological context of the Pilliga State Forest and surrounding agricultural areas.

63. As another example, the NWA Submission does not address Recommended Conditions B40-B48, which appear to me to be directed to reducing or mitigating ecological impacts

30 NWA Submission at [86].
31 NWA Submission at [83].
32 NWA Submission at [87].
33 NWA Submission at [85].
34 Recommended Conditions, B2-B3.

of the proposed development. For example, Recommended Condition B47 requires the Biodiversity Management Plan to integrate with the Water Management Plan and Rehabilitation Management Plan.

64. In my opinion, if matters raised by technical advisers or expert witnesses are said to provide a basis for the invoking the precautionary principle, the relevant expert opinions ought to have assessed the relevant adaptive management regimes proposed in respect of the development application. Otherwise, the analysis will fall short of the consideration required, as *Telstra* at [141] makes clear.

(b)(ii) The application of the principles of "intergenerational equity" and "intragenerational equity" to the Project in relation to climate change and social and economic impacts

65. I have reviewed the summary in the NWA Submission on the principles of intergenerational equity and intragenerational equity at paragraphs [33]-[36] and generally agree with that summary so far as it goes. However, the NWA Submission does not address the limb of the principle of intergenerational equity that is described as the conservation of access principle.

66. It has been accepted that there are three fundamental principles underpinning the principle of intergenerational equity, namely (emphasis added):[35]

> *(i) the conservation of options principle which requires each generation to conserve the natural and cultural diversity in order to ensure that development options are available to future generations;*
>
> *(ii) the conservation of quality principle that each generation must maintain the quality of the earth so that it is passed on in no worse condition than it was received;*
>
> ***(iii) the conservation of access principle which is that each generation should have a reasonable and equitable right of access to the natural and cultural resources of the earth.***

67. In my opinion, the NWA Submission does not acknowledge or address the third limb of the principle of intergenerational equity. Further, to the extent that the NWA Submission is taken to contend that no new fossil fuel projects should be approved at all, it is evidently a more straightforward matter to make such a submission in reliance only on the first two limbs, and ignoring the third. The conservation of access principle appears to me to pull firmly in the other direction. All three limbs of the principle of

[35] *Gray v Minister for Planning* [2006] NSWLEC 720, (2006) 152 LGERA 258 at [119], citing an academic paper of Preston CJ of LEC.

intergenerational equity ought to be considered in any application of this aspect of the principles of ESD.

Climate Change

68. I am asked to address the proposition advanced by some objector submissions concerned with climate change that the IPC should adopt a position that there should be no new approvals for fossil fuel development.

69. The NWA Submission argues that the approval of the Project at the current time is contrary to the principle of inter-generational equity because of the cumulative impact of greenhouse gas (**GHG**) emissions from the Project, which is inconsistent with the carbon budget approach towards climate stabilisation and the Paris Agreement climate target. The NWA Submission states that the Project's contribution to cumulative climate change impacts means that its approval would be inequitable for current and future generations.[36]

70. The submission of Professor Penny D. Sackett, summarised and adopted in the NWA Submission,[37] and the tenor of many others who spoke at the public hearing, is the idea that no new fossil fuel development can be approved. To be fair to those who made objections in such terms, it may be assumed that many of them were advocating a particular outcome rather than suggesting that the necessary outcome of a lawful consideration of the SSD application is its refusal.

71. However, it appears to me that the NWA Submission does not engage with the particular circumstances of the SSD Application and the likely impact that this Project would have on climate change. Rather, it appears to endorse an approach that does not take account of relevant government policy,[38] and which was explicitly rejected in *Gloucester Resources Limited v Minister for Planning* [2019] NSWLEC 7, (2019) 234 LGERA 257 (***Rocky Hill***). Adopting the approach apparently advocated in the NWA Submission would make impermissible a class of developments that are currently permissible in a range of locations throughout NSW under a range of planning instruments. If a consent authority were to take such as approach – for example by concluding that based on the carbon budget approach as described by Professor Sackett,[39] no new fossil fuel developments could be approved under any circumstances – I consider it would not be complying with the statutory framework by which the development application must be determined.

36 NWA Submission at [75].

37 At [74].

38 Which may be considered in accordance clause 14(2) of the Mining SEPP.

39 Transcript, Day 4, P-49, line 24 to P-51, line 2.

72. The contention that there be no new fossil fuel developments approved was raised and rejected in *Rocky Hill*. In *Rocky Hill*, the contribution that the GHG emissions of the proposal would make to climate change was not the essential reason for refusal. The significant unacceptable planning, visual and social impacts of the proposed development in that case were by themselves considered to be sufficient reasons to refuse the application.[40] In considering the 'carbon budget' approach, the Court described this as a "policy decision" and held that "*the better approach is to evaluate the merits of the particular fossil fuel development that is the subject of the development application to be determined*".[41]

73. In my opinion, no court has endorsed the principle or policy that no new fossil fuel developments ought to be approved. On the contrary, there are recent examples of primary decisions to approve fossil fuel developments being upheld in court: see for example *Australian Coal Alliance Inc v Wyong Coal Pty Ltd* [2019] NSWLEC 31. Whether or not a new fossil fuel development ought to be approved is a question that falls to be determined by consideration of the facts of the particular development in the context of the applicable law, which in my view does not include any principle or policy that no new fossil fuel developments ought to be approved.

74. The IPC's task, therefore, is to assess the SSD Application on the evidence available before it. In this regard, I note that the EIS sets out the results of the assessment by Santos of GHG emissions, including Scope 1, Scope 2 and Scope 3 emissions.[42] In my opinion, the consideration by the IPC of that material ought to be done in the context of its overall consideration of the merits of the proposal under section 4.15 of the EP&A Act, without being bound by a "policy decision" such as that cautioned against in *Rocky Hill*.

75. I note that the materials provided to the IPC in the Assessment Report include consideration of the application of the principles of intergenerational equity and intragenerational equity to the issue of climate change. This issue has been considered throughout the assessment of the Project and in the EIS as stated by Mr Kitto on Day 1 of the public hearing.[43]

Social and Economic Impacts

76. The NWA Submission at [78]-[81] makes a number of statements regarding social impacts, with one short statement on economic impacts at [82]. An opinion of Dr Alison Ziller in relation to social impacts is also cited at [81]. The basis on which the NWA

40 At [556].

41 At [552]-[553].

42 Appendix R of the EIS, summarised in Chapter 24.

43 Transcript, Day 1, P-25, lines 13-18; EIS pages 32-7 to 32-8.

Submission finds any fault with the assessment of these issues in the Assessment Report is not apparent. The NWA Submission does not provide particular reasons for thinking that the principles of intergenerational equity and intragenerational equity are breached.

77. I am instructed to address this issue on the basis that it is open to the IPC to make the following findings about the impacts of the proposed development in relation to social and economic impacts:

(a) The Project will impact very few sensitive receivers / landowners;

(b) The Project will be carried out in an area that is already the subject of mining activity and CSG appraisal activities. Access agreements are already in place between Santos and several landowners. (This is to be contrasted to the town of Gloucester, which is relatively 'pristine' and shielded from existing mining activity. It is also to be contrasted with the Warkworth Extension Project, which would have expanded mining close to the town of Bulga);

(c) The dust impacts, and arguably also the visual impacts, of CSG operations are significantly less than a coal mine. Surface infrastructure is minimal and will have relatively low visual impact;

(d) Unlike a coal mine, where the location of the mine is dictated by the location of the resource, CSG can be accessed from various locations and surface infrastructure can be located to avoid or mitigate adverse impacts; and

(e) No property acquisition conditions are proposed for the Project. Mitigation measures are proposed in relation to only a handful of sensitive receivers. This is to be contrasted with the project conditions in *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Limited* [2013] NSWLEC 48, (2013) 194 LGERA 347 (***Warkworth LEC*)** where, for example, 20 properties had automatic acquisition rights on the basis of noise impacts, a further 41 had automatic mitigation rights, and there was the potential for all privately owned land in Bulga to be acquired "*if the noise generated at the Mount Thorley-Warkworth mine complex causes sustained exceedances*" of the noise criteria.[44]

78. If the IPC were to accept the matters set out in paragraph 77, in my opinion those matters would provide a sound basis for distinguishing the present application from the conclusions made about social and economic impacts in the decisions *Warkworth LEC* and *Rocky Hill*.

44 *Warkworth LEC* at [376].

(c) The Minister's "*Statement of Expectations for the Independent Planning Commission*" and procedural fairness to the NWA

79. The NWA Submission asserts that the Minister's "*Statement of Expectations for the Independent Planning Commission*" (applicable for the period from 1 May 2020 to 30 June 2021) creates expectations of the IPC that are "*bad in law*".

80. Specifically, the NWA Submission contends:

> *The Minister's Statement of Expectations states that he expects the IPC 'to make decisions based on the legislation and policy frameworks and informed by the Planning Secretary's assessment'. To the extent that this statement seeks to depart from the text of s 4.15, it is bad in law…*
>
> *Further, the Statement of Expectations states that the Minister encourages the IPC to "seek guidance from the Planning Secretary to clarify policies or identify policy issues that may have implications for State significant development determinations*." *Again, this statement is inconsistent with the proper role of an independent IPC, which is required to determine the Project according to law, and not by reference to any guidance from the Planning Secretary on policy issues that may have implications for the Project.*[45]

81. As any reasonable reader of the Minister's statement will observe, there is nothing in the Statement of Expectations that suggests that:

    (a) the IPC should depart from the consideration required by the EP&A Act, including s 4.15 as applied by s 4.40; or

    (b) that the Planning Secretary's assessment should be given dispositive weight; or

    (c) that seeking policy guidance from the Planning Secretary is mandatory or that the Project should not be determined in accordance with law.

82. In my opinion, the NWA Submission does not provide any grounds for thinking that the Minister's Statement of Expectations is invalid or "*bad in law*".

83. The NWA Submission also suggests that the objectors to the Project have been denied procedural fairness to date because the IPC has met privately with supporters of the Project, namely the proponent, the Department and Narrabri Shire Council, but has not met with those groups, including NWA, its members, or members of the community who oppose the Project.

84. I am instructed that:

45 NWA Submission at [20]-[21].

(a) those who object to the Project have had the opportunity to make written submissions to the IPC and to be heard for oral submissions during the assessment of the Project application, including in the course of a 7-day public hearing, in which a minimum 5 minutes speaking time was given to each speaker;

(b) in particular, the NWA (represented by counsel and the technical advisers formally engaged by it) was given the opportunity to make oral submissions for a total of 175 minutes during public hearing, in addition to its written submissions;

(c) the objectors have had the opportunity to inform themselves about the information presented at the meetings between the IPC and Santos, the DPIE, Narrabri Shire Council, the Water Expert Panel and the other agencies, by means of the availability of complete copies of the transcripts of all of those meetings;

(d) the objectors have had the opportunity to make oral and written submissions on the matters discussed at those meetings.

85. In my opinion, those facts do not demonstrate any denial of procedural fairness to the NWA, its members or other objectors.

(d) The operation of clause 14 of the Mining SEPP

86. Clause 14(1)(c) of the Mining SEPP provides:

> *Before granting consent for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider whether or not the consent should be issued subject to conditions aimed at ensuring that the development is undertaken in an environmentally responsible manner, including conditions to ensure the following –*
>
> *…*
>
> *(c) that greenhouse gas emissions are minimised to the greatest extent practicable.*

87. Clause 14(1)(c) provides for an express mandatory consideration: the consent authority "*must consider*" the identified topic, which is "*whether or not the consent should be issued subject to conditions aimed at ensuring that the development is undertaken in an environmentally responsible manner*", including conditions of the identified character.

88. In my opinion, it would be an error of law to construe clause 14(1)(c) as if it required the proponent to minimise GHG emissions to the greatest extent practicable.

89. Clause 14(2) of the Mining SEPP states:

> *Without limiting subclause (1), in determining a development application for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider an assessment of the greenhouse gas emissions (including downstream emissions) of the development, and must do so having regard to any applicable State or national policies, programs or guidelines concerning greenhouse gas emissions.*

90. In circumstances in which it applies, cl 14(2) imposes a double duty: to consider an assessment of greenhouse gas emissions *and* to do so having regard to applicable State or national policies, programs or guidelines concerning greenhouse gas emissions.

91. Clause 14(2) has been the subject of authoritative consideration in the Land and Enviornment Court in *Wollar Progress Association Incorporated v Wilpinjong Coal Pty Ltd* [2018] NSWLEC 92 (***Wollar***). Among other things, the issue of whether the NSW Climate Change Policy Framework was applicable to the task under cl 14(2) was determined in *Wollar* and the Court held that it was not: see at [147]-[148] and [183].

(e) Submissions to the effect that the SSD Application must be refused as the Project has no "*social licence*"

92. I have reviewed the transcript of the public hearing and observe that an objection frequently made was that the absence of a 'social licence' for the Project was a reason for the SSD Application to be refused.

93. The term 'social licence' does not appear in any statute or legislative instrument that the IPC is called upon to consider or apply for the purposes of determining the development application for the Project. It does not have any special or accepted meaning in planning and environmental law. I am not aware of judicial consideration of the term in NSW courts in the context of the interpretation or application of NSW planning and environmental laws.

94. In other contexts. courts have noted the ambiguous meaning of the term. In the context of an injunction regarding a claim for misleading and deceptive conduct, in *No TasWind Farm Group Inc v Hydro-Electric Corp (No 2)* [2014] FCA 348, the Court said, at [38]:

> *... I harbour considerable doubt that what is conveyed by the notion of "social licence" can be identified with such precision as would enable a court to conclude that any particular practice fell within or outside of its scope. It seems to me arguable that the notion of "social licence" may be better understood as construct*

of social and political discourse rather than of law and that it is potentially too amorphous and protean in nature to be applied as the criterion for a judicial declaration.

95. To the extent that submissions about 'social licence' might be thought to raise considerations related to the "public interest" under section 4.15(1)(e) of the EP&A Act, in my opinion the only safe course is to abandon any gloss on that statutory provision and instead apply the words of the statute. In that regard, the consideration of the 'public interest' operates at a "high level of generality" and does not require the consent authority to have regard to any particular aspect of the public interest.[46]

Richard Lancaster SC

7 August 2020

[46] *Minister for Planning v Walker* [2008] NSWCA 224; (2008) 161 LGERA 423 at [41]; *Pittwater Council v Minister for Planning* [2011] NSWLEC 162 at [141].