Friends of Collector Inc.

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Ms Jade Hoskins
Planning Assessment Commission Secretariat
Level 3, 201 Elizabeth Street
SYDNEY NSW 2000

Dear Ms Hoskins,

Planning Assessment Commission Meeting re Capital 2 Wind Farm MOD 4, at Bungendore 28 April: Presentation from Friends of Collector Inc

Thank you for enabling us to lodge a submission in place of the presentation we were to make today.

As per discussions and emails with Philippa Vale of your office on 26 April, as the above meeting will now finish in the morning and I am unable to attend until the afternoon, I am lodging herewith a written submission to PAC for their consideration. Ms Vale advised that you will forward on to the PAC Members for their consideration.

Yours sincerely,

Frank Ross
28 April 2017

Friends of Collector Inc.

Friends of Collector Inc

Mr John Hann (Chair), Mr Stephen O'Connor and Ms Abigail Pegrum AM
Planning Assessment Commissioners for Capital 2 Wind Farm Mod 4
C/- Planning Assessment Commission Secretariat
Level 3, 201 Elizabeth Street
SYDNEY NSW 2000

Dear Commissioners

Planning Assessment Commission Meeting re Capital 2 Wind Farm Mod 4, at Bungendore 28 April: Presentation from Friends of Collector Inc

Please find attached our submission for your consideration in place of the presentation we were to make today. This was arranged with the PAC Secretariat on 26 April, as the above meeting will now finish in the morning and we am unable to attend until the afternoon.

Yours sincerely,

Frank Ross
28 April 2017

Friends of Collector Inc.

Introduction

Friends of Collector much appreciates the opportunity to present its case to you. It is made on the following basis:

1. the proposed development is in our district – some 15 kilometres from Collector – and shares some of the environmental and political issues associated with the proposed Collector Wind Farm ;
2. this application is for an extension of an approval which we consider to be manifestly unwarranted due to political, economic and technological developments since the original approval; and
3. extension of the approval would represent a precedent which will be prejudicial to the interests of other communities with approved or proposed windfarms where the developer has not been able to obtain funds for development but simply wishes to buy time in the hope of changing political and economic fortunes - while keeping communities in hostage to the continuing uncertainty and division over their future.

The proponent set out his case for the extension in his application letter of 16 September 2016 to the NSW Department of Planning and Environment. The key part is the *Justification* section on page 2:

Since the Project Approval was granted there have been significant changes to both turbine technology and the Australian Government's Renewable Energy Target. These changes have prevented construction of Capital 2 Wind Farm from commencing prior to the current lapsing date of 1 November 2016. The proposed extension of the lapsing date will enable CWF2PL sufficient time to undertake a review of the approved Capital 2 Wind Farm to ensure that it remains in line with current technology and energy market circumstances.

The proponent further asserts in the *Justification* section that:
Investor confidence in the renewable energy industry has significantly increased since the previous Modification, Modification 3, due to:

- *the revised RET adopted in June 2015;*
- *The signing of the Paris Climate Agreement in December 2015; and*
- *The decision of the Australian Government's Clean Energy Finance Corporation to continue to invest in wind farm projects.*

<u>Analysis</u>

The above assertion is not supported by the facts: wind farms have continued to be built in Australia (and the rest of the world) in recent years: the key factor is **MONEY**. Unfortunately for the proponent, Capital 2 wind farm is not economic without a higher RET. It has tried for **5 years** to obtain a Power Purchase Agreement (PPA) with various electricity suppliers but has not been able to get one. It was also been **unsuccessful over the past two years** with three tenders to the ACT Government rounds of Wind Auctions.

The Federal Government's RET Review and associated legislative changes were concluded in June 2015: **the proponent has thus already had ample time** to review technology and market circumstances – and obtain a PPA if one is to be had. The problem for the proponent is that the electricity market has many new and competing technologies with better investment prospects (eg, solar, new battery technology, biomass, pump hydro and clean coal). In addition there are also more approved windfarms looking for PPA's than will ever be needed (there are many official sources, the best recent summary is in the NSW Department of Environment and Heritage's commissioned report from Urbis P/L last year – see abstract at **Attachment 1**)

In regard to the Paris Climate Agreement signed in December 2015, the proponent's tenuous argument that this improves wind farms prospects in Australia has been torpedoed by the subsequent USA Presidential Election: rejection of this Agreement was a fundamental part of his electoral platform. The Trump administration's subsequent abolishment of its climate change department and sacking of staff confirms this is real. The Australian media have confirmed the Paris Agreement is meaningless without the USA's support.

The proponent's further claims his case is supported by the decision of *the Australian Government's Clean Energy Finance Corporation to continue to invest in wind farm projects.* The Corporation's policy, however, **does not have a specific brief** "*to continue to invest in wind farm projects*' but rather a more general one, with a particular recent priority for supporting innovative technology and processes (see **Attachments 2** and 3 for further details). The proponent is thus again overstating his case and misrepresenting the Federal Government's position through spin and sophistry. The fact is there is no shortage of Government Ministers on record who are specifically opposed to the Capital Wind Farm (including the local Federal Member and Assistant Minister to the Prime Minister, Hon. Angus Taylor, who advocates abolition of the RET – see Wikipedia). The Government's recent advocacy of "clean coal" and pump hydro technology to meet carbon reduction targets and silence on wind farms would seem to confirm the proponent is out of step with the real policy agenda of the Government.

The Department's Assessment of this application (see **Attachment 4**) is commendably more measured than the proponent regarding the impact of the Federal RET review and the possible market for this proposed development; and is also cognizant of the effect on associated communities. While acknowledging the Federal RET Review had affected investor confidence, the Department does assert, however, that *the prospects of developing the project have improved significantly since this matter has been resolved at the Commonwealth level*. Given that is almost 2 years since the RET issue was resolved, this assertion, like the applicant's, seems to be based on hope and retrieving something from their investment of time and resources, rather than the facts as outlined in preceding paragraphs above.

The Department is also to be commended for recognising that the applicant's argument for a further 5 years extension of the approval is not soundly based. However, its recommended compromise of a two year extension seems to be based on previous projections about the place of Wind Farms in the electricity market prior to the Federal RET Review. Recent developments confirm, however, there is no “normal”, in the electricity market: renewables technologies and Federal Government policies have rapidly changed and developed on an accelerating basis in recent years.

The assumptions underlying the policies and practices of the NSW Department of Planning and Environment in considering Wind farm applications and the electricity market accordingly appear to be not current with the economic, technological and political context. To take just two examples, solar and battery technologies are having a revolutionary impact on the electricity market and wind power is being increasingly marginalised (see **Attachment 5**). In addition, as their Urbis P/L report (previously cited) advises, there is already no shortage of proposed and approved wind farms that will be left on the shelf. In addition, as outlined previously above, the Federal Government is particularly not supportive of the Capital Wind Farm. There is thus no reality in trying to have it both ways: the most cost–effective and public benefit outcome is to make the decision against the extension.

Conclusion

All the above evidence demonstrates that the proponent has very slim prospects of finding the MONEY for its proposed development. Its only long-term hope is for the RET to be significantly increased by the Federal Government. Holding out for such an event is surely not what the PAC is about: as Maynard Keynes said: “In the long-term we are all dead.”

So the question for the PAC is, why should it be complicit in the proponent’s false claims of having prospects and Government support - and holding affected communities hostage? The market has chosen others and already decided this proposed development is a dead duck. The proponent is only offering “spin” rather than tangible evidence to back up its claims.

Since PAC members are obliged to uphold the public interest by making their decision based on evidence, the proponent is clearly not even past first base. There is also already an abundance of approved Wind Farms which cannot get finance. To grant this extension of approval thus will only create:

1. an unnecessary precedent for other proponents with lapsing approvals;
2. unnecessary work and costs for future PACs; and
3. unnecessary stress and costs on affected communities.

It is therefore in the interest of the State Government, the PAC and affected communities that this application be rejected.

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Attachment 1

Review of the Impact of Windfarms on Property Values
Urbis P/L, 21 July 2016

Executive Summary (p5)

The NSW Office of Environment and Heritage (OEH) commissioned Urbis to undertake an investigation into the potential impact of wind farm developments on property prices in NSW. This study follows on from the 2009 NSW Valuer-General's assessment of the impact of wind farms on property values. The current study included:

♣ a literature review of existing reports and papers on the impact of wind farms on property values, both in Australia and overseas

♣ preparation of six case studies in NSW and Victoria, including analysis of sales data of properties near wind farms over the past 15 years to identify any differences between wind farm impacted properties and the broader property sales market

♣ a synthesis of the findings from the literature review and data analysis phases to pinpoint key drivers that may impact the value of land around wind farm developments.

There is insufficient sales data to provide a definitive answer to the question of whether wind farm development in NSW impacts on surrounding land values utilising statistically robust quantitative analysis techniques. Therefore, the study was based on the best available data and traditional valuation sales analysis techniques to compare the change in values around wind farms over time and qualitative information from a review of the international literature on the impact of wind farms on property values. Based on the outcome of these research techniques, it is our expert opinion that windfarms may not significantly impact rural properties used for agricultural purposes. *There is limited available sales data to make a conclusive finding relating to value impacts on residential or lifestyle properties located close to wind farm turbines, noting that wind farms in NSW have been constructed in predominantly rural areas.* In undertaking this assessment, we encountered limitations in the availability of sales transactions around wind farms in NSW, and some inconsistency in results showing how properties performed relative to the broader market.

The limited number of sales transactions over a 15-year period from 2000 to 2015 is typical of rural and rural residential areas, which have a relatively low population density and larger individual properties. The literature review of Australian and international studies on the impact of wind farms on property values revealed that the majority of published reports conclude that there is no impact or a limited definable impact of wind farms on property values. Those studies which identified a negative impact are based in the northern hemisphere and are associated with countries with higher population densities and a greater number of traditional residential and lifestyle properties affected by wind farms. This is generally contrary to the Australian experience, with most wind farms being located in low population density environments that derive the majority of their value from productive farming purposes.

Changes in the circumstances of future wind farm developments that may warrant future additional studies into value change include:

♣ development of wind farms near urban centres such as towns and villages that may have direct impacts on the residential amenity of these locations

♣ a significant increase in the concentration of wind turbines compared to current practice

♣ significant changes in the planning approval process or policy settings for wind farms.

……………..

P 8

Windfarms in NSW

....Whilst there are only four wind farms in NSW with a capacity of over 50 MW, there are currently 10 operating commercial wind farms in total, ranging in size from 1.32 MW to 165.5 MW. The total installed capacity of these operating wind farms is approximately 667 MW. Two more wind farms are currently under construction with a combined capacity of 492 MW. There are also a significant number of proposed wind farms that are awaiting planning approval or are yet to be built (22 in total). These combined proposals could theoretically provide an additional 5,259 MW of installed capacity, close to an 788% increase on the current capacity. **In practice, limitations on grid capacity and a highly competitive energy market mean that many of these proposals are unlikely to proceed.**

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Attachment 2

From Australian Government Budget 2016-17. Part 2: Expense Measures

Clean and Renewable Energy Innovation — Clean Energy Finance Corporation and the Australian Renewable Energy Agency

Expense ($m)

	2015-16	2016-17	2017-18
Clean Energy Finance Corporation	2.0	50.9	61.4
Australian Renewable Energy Agency	-	5.3	4.9
Department of the Environment	-	0.9	2.8
Total — Expense	2.0	57.1	69.1
Related revenue ($m)			
Clean Energy Finance Corporation	*3.0*	*10.1*	*26.3*
Related capital ($m)			
Clean Energy Finance Corporation	*0.1*	*0.5*	*0.5*

The Government will retain the Clean Energy Finance Corporation (CEFC) and the Australian Renewable Energy Agency (ARENA), and refocus part of their activities towards the Government's innovation agenda.

The CEFC's investment mandate will be revised to allocate $1.0 billion in existing CEFC funding over 10 years to establish a Clean Energy Innovation Fund under the CEFC, to be jointly managed with ARENA. The Clean Energy Innovation Fund will provide debt and equity financing to assist emerging clean energy technologies make the leap from demonstration to commercial deployment. ARENA will also continue to manage its existing portfolio of grants within the $1.0 billion envelope of funding made available for this purpose in the 2014-15 Budget.

Both the fiscal and underlying cash impacts progressively improve over the medium and longer term due to increasing net investment earnings.

Further information can be found in the press release of 23 March 2016 issued by the Prime Minister and the Minister for the Environment.

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Attachment 3

Clean Energy Finance Corporation

Investment Policy

We invest on a case-by-case basis, providing finance on the least generous terms possible for a project to proceed, so it is as close to market terms as possible.

We invest on a case-by-case basis, and prefer investment opportunities where:

- The project supports diversification of the CEFC's portfolio: geographically, technologically, by off-take (power purchase agreement or merchant sale of power), by counterparties and project sponsors
- The project has a co-financier
- There is a sufficient equity buffer against underperformance
- The project is selling power at 'merchant rates' and the loan is expected to be comfortably serviced from revenue even if actual prices received fall below current future forecast prices

Our investment decisions are also influenced by the external public policy benefits they bring to the Australian economy, including:

- Reducing emissions
- Moving new clean energy technologies down the cost curve and bringing technological diversity into the energy mix
- Supporting productivity gains through energy efficiency
- Encouraging innovation, building capability and leveraging private sector funds into the clean energy sector

Through our diversified portfolio. we aim to reduce the risk posed by a large concentrated exposure in any single geography, technology, or counterparty. Any potential investment must also:

1. Meet the "complying investment" definition under the CEFC Act
2. Not be in breach of the current Government Mandate (as amended from time to time).

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Attachment 4

Department of NSW Planning and Environment

ASSESSMENT REPORT

Capital 2 Wind Farm Extension of Approval Lapse Date (MP 10_0135 - MOD 4)

EXECUTIVE SUMMARY

The Capital 2 Wind Farm (the project) is an approved renewable energy development located on the eastern shores of Lake George, approximately 10 kilometres (km) north of Bungendore. The project is adjacent to the operational Capital Wind Farm within the Queanbeyan-Palerang Regional Council (Council) local government area (LGA). Both the Capital 1 and 2 Wind Farms are owned by Infigen Pty Ltd (Infigen), with Capital Wind Farm 2 Pty Limited, a subsidiary of Infigen, managing the construction and operation of the project. The project was declared to be "critical infrastructure" by the NSW Government in 2009, and was approved by the NSW Planning Assessment Commission (Commission) in November 2011.

The project involves: • the development and operation of 41 wind turbines with a tip height of 157 metres (m); • a net generating capacity of 143.5 megawatts (MW) of electricity; • connection to a separate 33 kilovolt (kV) overhead transmission line; and • connection to TransGrid's Canberra-Kangaroo Valley 330 kV transmission line. Infigen is yet to commence construction of the project, and is now seeking to modify the project approval to extend the lapse date by an additional 5 years from the current lapse date of 1 November 2016.

The Department publicly exhibited the modification application and accompanying documentation from 23 September until 10 October 2016. During the exhibition period, the Department received 92 submissions, including 86 from the general public (85 objections, 1 support), 6 from agencies (no objections) and a supplementary letter of support from Council. Matters raised in submissions included cumulative impacts, property prices, uncertainty about the commencement of the project, currency of the original Environmental Assessment, the duration of the public exhibition for the application, and the status of the Capital Community Committee established by Infigen.

In its application, Infigen states that the key reason for the delay in the development of the project has been the uncertainty created by the Australian Government's Renewable Energy Target (RET) policy review. However, with the recent resolution of the RET, Infigen claims that market conditions have substantially improved and there are likely to be opportunities to secure a commercial off-take agreement to facilitate the development of the project.

Infigen also points to the benefits of the project, including:

• production of enough renewable energy to power more than 60,000 homes;

• creation of up to 120 full time jobs during construction and 6 full time jobs during operations;

and

• direct capital investment of $240 million into the NSW economy. Infigen has also made significant investment in the approvals process, including three modifications, which demonstrates a strong commitment to the project and its development.

Capital 2 Wind Farm MOD 4 Assessment Report NSW Government Department of Planning and Environment 2 In assessing the merits of the application, the Department considered the information provided by Infigen to support its application; the existing conditions of approval; public and agency submissions; the applicant's Response to Submissions; and the requirements of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The Department acknowledges that the RET review has affected investor confidence in renewable energy development over a number of years, and that the prospects of developing the project have improved significantly since this matter has been resolved at the Commonwealth level. The Department also acknowledges the environmental benefits of the project, including the renewable energy generated, reduction in greenhouse gas emissions and subsequent contribution to the RET scheme; and the economic benefits of the project to the local and regional economies.

The Department considers that these benefits can be realised through an extension in the lapse date of the approval without any increase in the environmental impacts that have already been assessed, approved and subject to the stringent conditions that were imposed when the project was approved by the Commission. There have also been no significant changes in the receiving environment since the original consent or subsequent modifications (as recently as 2015) that warrant re-assessment or significant amendments to the existing conditions of approval. In addition, the Department notes that the declaration of the project as "critical infrastructure" means that the project was, in the opinion of the then Minister for Planning, essential for the State of NSW for economic, environmental or social reasons.

Given the above, the Department does not consider it would be reasonable, or in the broader public interest, to allow the project approval to lapse without providing additional time to develop the project. Notwithstanding, the Department acknowledges the concerns of the public regarding ongoing uncertainty and delays associated with the project, and the need to realise the benefits of the project as soon as practicable. In this regard, the Department notes that Infigen is seeking a 5 year extension to the approval, meaning it may be 10 years from the original approval before there is any material progress in developing the project. The Department does not consider it is reasonable for the local community to have to live with ongoing uncertainty for another 5 years, and the Department considers that the applicant should be required to commence development in a shorter timeframe.

Accordingly, the Department considers that the modification is approvable but recommends extending the lapse date by another 2 years after the date on which current modification is granted, instead of 5 years. The Department considers this outcome provides an appropriate balance between addressing the concerns of the community and realising the significant economic and environmental benefits that the project would bring to the region and the State as a whole. It is also consistent with similar decisions for other wind farms in NSW, including the Silverton Wind Farm which was recently granted a 2 year lapse date extension following an initial request for 5 years.

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Attachment 5

Solar power to snare larger slice of 2020 renewables target

AFR Jan 29, 2017, Angela McDonald Smith

Large-scale solar is likely to grab a bigger slice of the 2020 Renewable Energy Target than anticipated just six months ago, with more than $2 billion of projects likely to reach financial close this year and even more next year, according to one expert.

The shorter lead times for solar projects compared with wind farms and rapidly falling costs means solar may capture as much as 27 per cent of the 33,000 gigawatt-hour end-decade target set for renewable energy generation, according to Sustainable Energy Research Analytics.

"The pace at which new solar projects are coming into the pipeline is taking people even in the industry by surprise," said Gero Farruggio at SERA. "I do think the impact of solar has been underestimated given the rate of change over the past six months."

The assessment of the likely contribution of solar adds further fuel to the debate on whether the 2020 target for renewable energy can be met at all.

Last week, ERM Power founder Trevor St Baker estimated that only 20,000 GWh of renewable power will be able to be generated by 2020, although that has been rejected by environmental analysis firm Green Energy Markets based on projects already in operation or under construction.

GEM's Tristan Edis said that line-up of projects put renewable generation on track to reach 23,000 GWh by 2019, while others close to reaching financial close took the total to just under 26,500 GWh.

While that still leaves a gap to the 2020 target, the shortfall was not due to a lack of projects at viable prices, rather to a lack of confidence about long-term regulatory settings that were making investors and retailers reluctant to commit to purchase contracts, Mr Edis said.

Solar advantages

However, he also said solar would capture a bigger chunk of the 2020 target than anticipated 12 months ago, potentially making up about half of the new renewables projects built over the rest of the decade.

Aside from costs, solar offers certain advantages over wind projects given greater certainty around when power will be produced and typically less variance for solar conditions through the year than wind, Mr Edis said.

SERA anticipates that more than 20 solar farms will reach financial close this year involving more than $2 billion in debt and equity funding.

Those projects, representing circa 1 gigawatt of capacity, will involve 12 backed by the Australian Renewable Energy Agency as well as several others that will proceed without direct assistance from the government agency but supported by the RET legislation.

While most of the funding requirement for this year's batch of projects will be debt funded, the equity part is expected to drive a number of mergers and acquisitions in the solar sector to well beyond last year's $330 million, said SERA's Ben Willacy.

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Meanwhile, about 200 MW of capacity from large-scale solar projects is likely to come into production this year from projects in the pipeline, more than double last year's capacity. But that will be outdone next year, when more than 750 MW of capacity is set to come onstream.
SERA is expecting $1.3 billion of investment this year in the sector, six times more than last year, to fund new capacity coming onstream plus early spending on 2018 projects. But that will be eclipsed again by spending next year.