JOINT REGIONAL PLANNING PANEL HUNTER AND CENTRAL COAST

Panel Reference	2017HCC045
DA Number	2017/01334
Local Government	Newcastle City Council
Area	
Proposed	Electricity Generating Works (Solar Farm)
Development	
Street Address	141 Minmi Road, Wallsend
	Lot 2 DP 1208481
Applicant/Owner	Newcastle City Council
Date of DA	20 October 2017
lodgement	
Number of	Nil
Submissions	
Recommendation	Approval
Regional	The proposal is listed within Schedule 4A of the <i>Environmental</i>
Development	Planning and Assessment Act 1979, being Council related
Criteria (Schedule	development over \$5 million.
4A of the Act)	
List of All Relevant s79C(1)(a) Matters	 Environmental planning instruments: s79C(1)(a)(i) State Environmental Planning Policy (State and Regional Development) 2011 State Environmental Planning Policy (Infrastructure) 2007 State Environmental Planning Policy No. 55 - Remediation of Land State Environmental Planning Policy No. 33- Hazardous and offensive development State Environmental Planning Policy No. 44-Koala Habitat Protection Biodiversity Conservation (Saving and Transitional) Regulation 2017 Newcastle Local Environmental Plan 2012 Development Control Plan: s79C(1)(a)(iii) Newcastle Development Control Plan 2012 Section 94A Development Contributions Plan 2009
List all documents submitted with this	Appendix A - Conditions of consent
report for the panel's consideration	Appendix C External Referral Comments
	Appendix C – External Referral Comments
Report data	Newcastle City Council
Report date	5 January 2017

Summary of s79C matters	
Have all recommendations in relation to relevant s79C matters been summarised in the Executive Summary of the assessment report?	Yes / No
Legislative clauses requiring consent authority satisfaction	
Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report?	Yes / No / Not Applicable (Has been addressed in the body of the assessment report)
e.g. Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP	
Clause 4.6 Exceptions to development standards	
If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report?	Yes / No / Not Applicable
Special Infrastructure Contributions	
Does the DA require Special Infrastructure Contributions conditions (S94EF)?	Yes / No / Not Applicable
Note: Certain DAs in the Western Sydney Growth Areas Special Contributions Area may require specific Special Infrastructure Contributions (SIC) conditions	
Conditions	
Have draft conditions been provided to the applicant for comment?	Yes / No
Note: in order to reduce delays in determinations, the Panel prefer that draft conditions, notwithstanding Council's recommendation, be provided to the applicant to enable any comments to be considered as part of the assessment report	

ASSESSMENT REPORT AND RECOMMENDATION

EXECUTIVE SUMMARY

A development application (DA 2017/01334) has been lodged with Council, seeking consent for electricity generating work (5 Megawatt Solar Farm). The proposed building works include:

- Commercial scale solar photovoltaic (PV) array with ground mounted panels; and
- Related infrastructure- Hardstand area/ inverter and transformer area/ service road/substation connection.

The proposal was placed on public exhibition for a period of 14 days from 2 November 2017 in accordance with the *Environmental Planning and Assessment Act 1979*, *Environmental Planning and Assessment Regulation 2000* and Section 8 of Newcastle Development Control Plan 2012. No submissions were received during the notification period.

The application is recommended for approval as the proposed development will have a positive social and economic benefit for the local and broader community through the use of renewable energy to offset energy consumption of Council facilities, which is economically and environmentally sustainable. The proposed solar farm is permissible with consent and is in the public interest.

The proposal is referred to the Joint Regional Planning Panel for determination pursuant to Part 4 'regional development' of State Environmental Planning Policy (State and Regional Development) 2011 as the proposed development is listed within Schedule 4A of the EP&A Act, being 'council related development over \$5,000,000'. The proposed development has a capital investment value of \$8,000,000.

The application was referred to Ausgrid for comment under Clause 45 of State Environmental Planning Policy Infrastructure 2007.

1. INTRODUCTION

This report provides a detailed overview of the development proposal for Electricity Generation Works (Solar Farm) at Council's Summerhill Waste Management Facility, 141 Minmi Road, Wallsend. The proposed works include a 5 Megawatt solar photovoltaic (PV) array with ground mounted panels and associated site works.

The development application is reported to the Hunter and Central Coast Joint Regional Planning Panel in accordance with section 23G and Schedule 4A of the Environmental Planning and Assessment Act 1979 (EP&A Act), as the development is of a type that is classified as 'council related development over \$5 million', being electricity generating works.

2. BACKGROUND

The proposed solar farm would be located within the Summerhill Waste Management Centre (SWMC) at Wallsend in the Newcastle LGA. SWMC is a solid waste landfill owned and operated by Newcastle City Council, which commenced operation in 1995. It is a modern, engineered landfill and resource recovery facility and is licensed by NSW Environment Protection Authority (EPA) to receive 'General Solid Waste (Putrescible and Non-putrescible) and Special Waste' under Environmental Protection Licence 5897. Previously, the site was used for open cut and underground mining activities. The SWMC Landfill Closure Plan manages remediation of the site as each waste cell is completed. Ongoing reshaping of the site occurs as part of the Landfill Closure Plan.

The proposal site is within an 'inactive' area of the facility that has been remediated. The proposed solar farm would be built on a capped zone with an underlying non-putrescible (inert) waste cell. Two (2) Megawatts of electricity are already generated from a separate landfill cell at the facility through a landfill gas power generating system. The proposed solar farm would generate an additional 5 Megawatts of renewable electricity.

The bulk of the generated power would be fed into the grid and would offset energy consumption at other Council owned facilities.

The proposed solar farm has the potential to add a significant amount of distributed generation to the area, contribute to Newcastle's renewable energy targets, offset energy costs through providing long-term budget certainty for electricity pricing, hedge against future price rises and create additional revenue for the City of Newcastle.

3. SITE DESCRIPTION

The overall site is irregular in shape and has an area of approximately 261 hectares. The approved area of the Summerhill Waste Management Centre comprises approximately 70 hectares of this land, with the remainder used as a buffer to neighbouring land uses.

The subject land is sited on the western side of Minmi Road in the locality of Wallsend. Wallsend is characterised predominantly by residential development and is located

approximately 10km north-west of the Newcastle CBD. The site is shown in Figure 1 below.

The area designated for the proposed solar farm is in the south-eastern sector of the site and comprises approximately 7 hectares of land. The proposal site is within an *'inactive'* area of the facility that has been remediated. The proposed solar farm would be built on a capped zone with an underlying non-putrescible (inert) waste cell.

An internal access road leads from Minmi Road around the southern fringe of the proposal site. The main internal access road for the general public does not lead past the proposal site, but rather, is located further to the north.



Figure 1 Aerial Photo showing whole site (Ref. SoEE prepared by NGH Environmental)

4. PROPOSAL

The proposed development includes:

- Commercial scale 5 Megawatt solar photovoltaic (PV) array with ground mounted panels.
- Related infrastructure- Hardstand area/ inverter and transformer area/ service road/substation connection.



Figure 2 Indicative photomontage of solar farm layout (Ref. SoEE prepared by NGH Environmental)

The proposed development relates to the establishment of a solar farm at the SWMC facility. The proposal site would comprise an area of approximately 7 hectares within the wider 261-hectare site, with around 5 hectares of solar panels.

The proposed solar farm would generate approximately 5 MW of renewable electricity. The bulk of the power from the solar farm would be fed into the grid via a direct connection into the nearby Maryland Ausgrid substation.

The modules would be in rows which allow access between them for maintenance and minimisation of row to row shading. The PV panels would occupy approximately 5 hectares. Footings for the panels would be either concrete pad or shallow screw footings, extending approximately 600mm into the soil profile and specific for use in landfill sites, with low anchoring depths to protect subsoils.

5. PLANNING ASSESSMENT

5.1 Environmental Planning and Assessment Act 1979 (EP&A Act)

5.1.1 Section 23G - Joint Regional Planning Panels

Section 23G and Schedule 4A (3) of the EP&A Act requires a Joint Regional Planning Panel to determine applications for council related development over \$5 Million. The capital investment value of the application is \$8,000,000. The application is to be determined by the Hunter and Central Coast Regional Planning Panel.

5.1.2 Section 91 - Integrated Development

The proposal requires approval from Subsidence Advisory NSW. However, as conditional approval from Subsidence Advisory NSW was received by the applicant prior to the lodgement of the application, the proposal is not considered to be 'integrated development' pursuant to Section 91 of the EP&A Act.

5.1.3 Section 79C Evaluation

The proposal has been assessed under the relevant matters for consideration detailed in s.79C (1) EP&A Act as follows:

5.1.3.1 Section 79C(1)(a)(i) provisions of any environmental planning instrument

State Environmental Planning Policy (State and Regional Development) 2011

This policy sets out the functions of regional panels in determining applications for regional development. Clause 20 and 21 of the SEPP require a Joint Regional Planning Panel to be the determining authority for development included in Schedule 4A of the Act. This includes applications for Council related development over \$5 million in value. The application is submitted to the Hunter and Central Coast Joint Regional Planning Panel for determination as the value of works is over \$5 million.

State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) was introduced to facilitate the delivery of infrastructure across the State by improving regulatory certainly and efficiency.

Part 3 Division 4 contains the provisions that are relevant to electricity generating works or solar energy systems. Clause 34 provides for the following types of infrastructure development permitted with consent:

34 Development permitted with consent

- (1) Development for the purpose of electricity generating works may be carried out by any person with consent on any land in a prescribed rural, industrial or special use zone.
- (2) Development for the purpose of a back-up electricity generating plant that operates for not more than 200 hours in any year may be carried out by any person with consent on any land.
 - (2A) Development for the purpose of the expansion of existing electricity generating works may be carried out by or on behalf of a public authority with consent on any land that is adjacent to the existing works.
 - (2B) Consent is not required to carry out any such development on land if the development could, but for subclause (2A), be carried out on that land without consent.
- (3) Development for the purpose of, or resulting in, a change of fuel source of an existing coal or gas fired generating works by a proportion of more than 5 per cent in any 12 month period may only be carried out with consent.
- (4) If, under any environmental planning instrument (including this Policy), development for the purpose of:
 - (a) industry, or
 - (b) a waste or resource management facility, may be carried out on land with consent, development for the purpose of electricity generating works that

generate energy from waste, or from gas generated by waste, may also be carried out by any person with consent on that land.

- (5) Without limiting subclause (1), development for the purpose of a small wind turbine system may be carried out by any person with consent on any land.
- (6) However, subclause (5) only applies in relation to land in a prescribed residential zone if:
 - (a) the small wind turbine system has the capacity to generate no more than 10kW, and
 - (b) the height of any ground-mounted small wind turbine in the system from ground level (existing) to the topmost point of the wind turbine is no more than 18m.

The proposed development would be consistent with subclause (1) and is therefore permitted with consent.

The proposal was considered by Ausgrid in accordance with Clause 45 of the ISEPP. No objections were raised to the proposal, subject to conditions.

State Environmental Planning Policy No.55 (Remediation of Land) (SEPP No.55)

State Environmental Planning Policy No 55 – Remediation of Land requires the consent authority to take into account whether or not land is contaminated, whether the land is in a suitable state for the proposed development and whether land requires remediation to reach a state that is suitable for that development.

The subject land is not listed on the register of Contaminated Sites. The subject land is utilised as a waste management facility and *'landfill sites'* are listed as a potentially contaminating land use activity in Table 1 of the Managing Land Contamination Planning Guidelines.

The area of the proposed solar farm is a non-putrescible waste cell. The underlying landfill is comprised of inert waste such as bricks, rubble, metal, wood and clothing. The waste cell has been surfaced with a geofabric liner, impervious clay capping at an average of 1300mm and an additional overburden topsoil layer averaging 150mm in depth.

It is proposed to install the PV panels on shallow concrete pad footings or by using shallow screw footings that would only require excavation to a depth of up to approximately 600mm. Additive fill may also be placed, dependant on the detailed structural design for the footing and mounting structures. There would be no ongoing excavation or disturbance of the site capping once the solar farm infrastructure was established.

Councils Environmental Services Unit has undertaken an assessment of the application, finding that the proposal is acceptable with regard to the provisions of SEPP 55. The following conclusion was made:

'As the proposed solar panels are to be located on a capped former landfill cell for inert waste, located several hundred meters from the nearest residents, the potential for significant negative environmental impacts from this type of development are considered to be low.

The applicant has demonstrated how the integrity of the capping layer is to be preserved in accordance with the existing landfill Closure Plan for the facility. Intrusive works into the existing capping layer for the purposes of footings and services are minor and information has been provided to demonstrate how this can be affectively managed to protect human health and the environment. No disturbance of the waste material is proposed.'

State Environmental Planning Policy No 33- Hazardous and offensive development

State Environmental Planning Policy No 33 – Hazardous and Offensive Development requires that consideration be given to the current circulars or guidelines relating to such development as published by the Department of Planning, when determining if the proposal is so classified.

Electricity generating works are not identified as a potentially offensive or potentially hazardous industry in Appendix 3 of the Guidelines. Lithium batteries are to be stored on site, which are classified as a Class 9 dangerous good.

The storage of ADG Code Class 9 goods is not included in the Screening Threshold in Table 1 of the *Hazardous and Offensive Development Application Guidelines*, 2011, as these "are miscellaneous dangerous goods, which pose little threat to people or property".

In accordance with the Guidelines, it can therefore be assumed that there is unlikely to be a significant offsite risk associated with the storage of the lithium batteries. The transportation frequency for the lithium batteries is also well below the Transportation Screening Thresholds contained in Table 2 of the Guidelines.

Consequently, the proposed development is considered to not be potentially hazardous and a Preliminary Hazard Analysis (PHA) is not required to be prepared for the proposal.

State Environmental Planning Policy No 44- Koala Habitat Protection

The proposed work area is located within the Newcastle LGA, which is listed on Schedule 1 of SEPP 44.

There were no primary, secondary or supplementary feed tree species present within the proposal area; however, *Eucalyptus puncata* (Grey gum) is present within the broader study area and study locality.

According to SEPP 44, the vegetation within the proposal area cannot be considered "potential Koala habitat".

Biodiversity Conservation (Saving and Transitional) Regulation 2017

A full biodiversity assessment has been undertaken in accordance with the provision outlined within the Regulation. No threatened flora or fauna species were observed during the site inspection and following the biodiversity assessment, impacts are considered unlikely.

Regional Environmental Plan

There are no regional environmental plans that are relevant to this proposal.

Newcastle Local Environmental Plan 2012

Clause 1.3 – Land to which Plan applies

Newcastle Local Environmental Plan 2012 (LEP) applies to land identified on the 'Land Application Map'. The subject development occurs within this area.

Clause 2.3 Land Use Table - Zoning

The site is zoned 'SP2 Infrastructure' under the LEP. The use identified for the site is a 'waste or resource management facility'. This would also extend to include any development that is ordinarily incidental or ancillary to development for that purpose.

Whether the proposed electricity generation is considered to be ordinarily incidental or ancillary is not a relevant matter, as the provisions of the ISEPP override the LEP.

Clause 4.3 Height of Buildings

There is no height limit identified for the site. The proposed solar panels will be ground mounted and are acceptable with regard to height and appearance.

Clause 4.4 Floor Space Ratio

There is no floor space ratio identified for the site.

Clause 5.5 Development within the Coastal Zone

The site is not located within the coastal zone.

Clause 5.10 Heritage Conservation

The subject site is not State listed or locally listed for its cultural heritage significance and it is not an identified archaeological site.

Clause 6.1 Acid Sulfate Soils

The subject site is identified as containing Class 5 Acid Sulphate Soils (ASS). The proposed solar farm does not trigger the requirement for an Acid Sulfate Soil management plan. The works are not within 500m of class 1, 2, 3 or 4 soils, is not below 5m AHD and will not lower the water table below 1m AHD.

Clause 6.2 Earthworks

The earthworks proposed in association with the proposal have been considered in accordance with this clause. In this regard the application is considered to be acceptable.

5.1.3.2 Section 79C(1)(a)(ii) any draft environmental planning instrument that is or has been placed on public exhibition

There is no exhibited draft environmental planning instrument relevant to the application.

5.1.3.3 Section 79C(1)(a)(ii) any development control plan (and section 94 plan)

The main planning requirements of relevance in the Newcastle Development Control Plan 2012 (DCP) are discussed in detail below.

4.02 Bushfire Protection

The site is identified as being bushfire prone land. The development has been assessed against the objectives of *'Planning for Bushfire Protection 2006'*. The solar farm does not include any buildings, and is intended to be maintained as *'managed land'*, in order to reduce the bushfire risk.

The risk of ignition from the solar farm substation or other electrical elements is considered to be low, as the network will be electronically monitored for any faults or damaged equipment.

4.03 - Mine Subsidence

The site is located within a proclaimed Mine Subsidence District and a conditional approval was granted from the Mine Subsidence Board.

4.04 - Safety and Security

The solar farm will be located within the bounds of the existing waste management facility, for which the existing security fencing and monitoring is considered to be appropriate. In conjunction with the existing security measures, a 2.4m mesh wire fence will be installed surrounding the site, with security lighting installed to further protect the infrastructure from any possible vandalism or security breaches.

5.01 Soil Management

The subject site has previously been cleared and disturbed as part of previous mining and landfill activity, however, soil disturbance for the purpose of establishing solar infrastructure and ancillary development is to be minimised.

Construction works will be managed so as to implement erosion and sediment control principles. An erosion and sediment control plan is to be provided to Council for approval prior to the commencement of any work on site.

5.02 - Land Contamination

Reference is made to the previous comments made in relation to SEPP 55.

5.03 - Tree Management

Three trees are proposed to be removed as a result of the development. A full biodiversity report has been prepared in relation the impact of the proposed solar farm on existing flora and fauna on the site. The proposed removal of the trees is considered to have a minimal impact on the overall biodiversity of the site. The trees are not identified as being significant vegetation in accordance with the DCP.

5.04 - Aboriginal Heritage

A desktop Due Diligence assessment has been completed by the applicant and is included in the statement of environmental effects.

The proposal site is highly disturbed as it forms part of a waste management facility. The proposed site of the solar farm is a non-putrescible waste cell that is capped with 1-2 metres of clay. A search of the Aboriginal Heritage Information Management System (AHIMS) found that there are no registered Aboriginal heritage sites located within 200 metres of the subject land.

The proposal would require earthworks for the construction of the solar farm infrastructure. However, due to the disturbed nature of the proposal site, the potential presence of Aboriginal heritage objects is considered to be negligible.

7.02 - Landscape, Open Space and Visual Amenity

The visual environment of the local area is largely defined by the undulating ridges and slopes formed as part of the SWMC development.

The proposed solar farm will not impact on the immediate visual amenity of the site. The positioning of the solar farm eliminates any viewing opportunities from surrounding residential properties. The whole waste management facility is located within a valley, which has screening in the form of vegetation and topography to any visual receivers.

The closest residence to the proposed solar farm is 270m to the north, with vegetation and topography in the form of a ridge eliminating any views to the solar panels. As can be seen below in Figure 3, the nearest dwellings to the boundary of the waste management facility sit lower than the ridge/hill behind. Figure 4 below shows the extent of screening to the site.

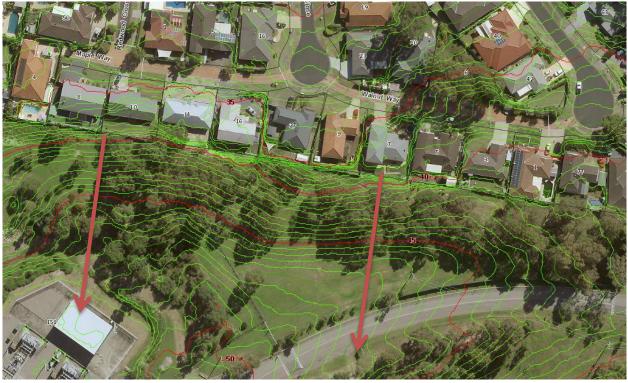


Figure 3 Contour lines showing elevation behind residential properties eliminating views from dwellings.



Figure 4 Photograph showing existing vegetation screening on the site, looking north towards closest dwellings.

The solar farm will be visible from Summerhill Road for a few seconds to vehicles entering SWMC, with minimal impact expected.

Sun glint and glare effects of the solar panels are also expected to be minimal given lack of direct visibility and line of sight from surrounding receiver locations.

The existing vegetation and landscaping on the site is considered sufficient in regards to the provisions of the DCP.

7.03 Traffic, Parking and Access

The existing access to the site via Minmi and Summerhill Roads is acceptable. The parking demand generated by the solar farm would be minimal, with sufficient space on site for the parking of required vehicles.

7.06 Stormwater

Surface water from the subject site currently flows downslope (northwards) and is directed towards drainage channels and leachate collection points.

The solar farm would require the installation of hardstand areas (to the east and west), concrete footings or shallow screw footings for each of the solar panels and an access road on the southern extent of the development. The existing stormwater arrangements would continue to operate and allow collection of all stormwater, as per the current arrangements.

7.08 Waste Management

Conditions will be included to assure that waste management is implemented during the construction phase.

8.00 - Public Participation

The application was notified for a period of 14 days from 2 November 2017 to 16 November 2017. No submissions were received.

Newcastle Section 94 Western Corridor Development Contribution Plan

The application is located within the Western Corridor catchment area. As per the Western Corridor plan, the development does not incur a section 94 contribution.

5.1.3.4 Section 79C(1)(a)(iia) Planning agreements

No planning agreements are relevant to the proposal.

5.1.3.5 Section 79C(1)(a)(iv) the regulations (and other plans and policies)

The application has been considered pursuant to the provisions of the *Environmental Planning and Assessment Act 1979* and *Regulation 2000*.

Hunter Regional Strategy

The Hunter Regional Plan provides an overarching framework to guide land use plans, development proposals and infrastructure funding decisions. The NSW Government's vision for the Hunter is to be the leading regional economy in Australia with a vibrant new metropolitan city at its heart.

To achieve this vision the Government has set four goals for the region:

- The leading regional economy in Australia
- · A biodiversity-rich natural environment
- Thriving communities
- Greater housing choice and jobs

The proposal is consistent with the aim of expanding the regional economy and creating thriving communities through renewable energy.

Lower Hunter Regional Strategy

The primary purpose of the Lower Hunter Regional Strategy is to ensure that adequate land is available and appropriately located to accommodate the projected housing and employment needs of the Region's population over the next 25 years. The proposal is satisfactory having regard to this policy.

5.1.3.6 Section 79C(1)(a)(v) Coastal management plan

No Coastal Management Plan applies to the site or the proposed development.

5.1.3.7 Section 79C(1)(b) the likely impacts of the development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality

As outlined in this report, the proposed solar farm will have minimal impacts on the natural and built environments. The proposed development will result in the re-use of a capped land-fill area. The utilisation of this area is considered to be beneficial economic use of the land, which will positively benefit the community.

The proposal will create positive economic impacts through the demand for goods, services and trades during the construction phase and provide employment during operation.

5.1.3.8 Section 79C(1)(c) the suitability of the site for the development

Based on the application and discussions in this report, the site is considered suitable for the development. The solar farm would be located above a filled waste cell; the cell contains inert waste and has been satisfactorily capped with an impervious layer. The construction and ongoing impacts of the solar farm are considered to be consistent with the contamination risk of the subject area.

It is considered that the proposal is consistent with the public interest, addressing reliance on non-renewable energy sources and facilitating renewable energy production in line with the aims of the NSW Renewable Energy Action Plan.

5.1.3.9 Section 79C(1)(d) any submissions made in accordance with this act or the regulations

The application was notified and advertised in accordance to the Regulations and no submissions were received.

5.1.3.10 Section 79C(1)(e) the public interest

The proposed solar farm is considered to be in the public interest, as it would enable the redevelopment of the subject site in a manner that is compatible with the current use of the wider facility and does not adversely impact on the amenity of the locality.

6. CONCLUSION

Subject to a number of relevant conditions as recommended in the attached draft condition schedule, the proposal is considered to be acceptable against the relevant heads of consideration under section 79C of the Environmental Planning and Assessment Act 1979.

7. RECOMMENDATION

THAT the Hunter and Central Coast JRPP, as the consent authority, grant development consent to DA2017/01334 (2017HCC045) for electricity generating works (solar farm) at 141 Minmi Road, Wallsend, pursuant to Section 80 of the EP&A Act subject to the conditions in Appendix A.