

Ref: 2019-0241



URPS

28 February 2020

Mr Jason Bailey
Team Leader – Planning and Design Code
Department of Planning, Transport and Infrastructure
50 Flinders Street
ADELAIDE SA 5000

ADELAIDE
12/154 Fullarton Road
ROSE PARK SA 5067
(08) 8333 7999

MELBOURNE
4 Brunswick Place
FITZROY VIC 3065
(03) 8593 9650

www.urps.com.au
ABN 29 615 282 392

Email dpti.planningreformsubmissions@sa.gov.au

Dear Jason

Terregra Renewables Submission – Planning and Design Code Phase 3 – Rural Zone Renewable Energy Facilities and Solar Farm Facilities less than 5MW

URPS provides this submission on behalf of Terregra Renewables, a company that has recently constructed one solar renewable energy facility (REFs) and gained Development Plant Consent for three others in the Primary Production Zone in the Murray Bridge Council area.

Background

This submission primarily relates to a review of the Draft Code policies applying to ‘solar farms’ less than 5MW. The sites of the approved Terregra Renewables 4.95MW solar farms will be in the proposed Rural Zone after the transition to the Code. The Rural Zone appears to be the only zone which specifically contemplates REFs of all types.

THE DRAFT CODE

The intent to identify REFs as a Desired Outcome in the Rural Zone is supported.

The ‘*Infrastructure & Renewable Energy Facilities*’ provisions of performance outcomes are generally appropriate. We respectfully submit the following matters require greater attention to ensure clarity in interpreting the Code.

Land Use Definition and Related Terms

There are several terms in addition to Renewable Energy Facilities (REFs) used in the Code but not all are defined (refer **Attachment A**). In the context of a performance assessed approach, more definitions and/or clarity within definitions is essential. Subjective terms such as ‘small scale’ require clarification and replacement with quantifiable thresholds to enable interpretation.

Rural Zone

REFs are not currently listed in Performance Objective 1 other than a reference to an undefined term which is *small-scale ground mounted solar power facility*, eg not wind farms. This must be addressed and it assumed the omission of all types of REFs (eg wind farms, medium to large scale solar farms etc) is just an oversight.

Table 1 - Accepted Development Classification

It is understood that only 'minor' types of solar facilities will be in this classification (ie not requiring planning consent subject to satisfying various criteria).

The Table 1 terms and associated criteria in the draft are one way to potentially more clearly define 'land use terms' that are not currently captured by the definition of REF. The Code document, in particular the definitions and land use terms, need to be clearly understood by the public as well as planning practitioners and developers.

Table 2 - Deemed to Satisfy Classification

There is no form of REF or undefined 'small-scale ground mounted solar power facility' that can be assessed as deemed to satisfy. Additional and clearer definitions would provide the clarity for potential types of small-scale solar farms that could be considered in Table 2.

Table 3 – Applicable Policies for Performance Assessed Development

A definition of a 'small-scale ground mounted solar power facility' is required. Currently it is not possible to interpret if a <5MW facility (but >30kW) such as a typical Terregra Renewables proposed solar farm, is included in this table.

Table 4 – Restricted Development Classification

The Terregra Renewables solar REF sites are all in the proposed Rural Zone in an area affected by the Environment & Food Production Area Overlay. The current approach to not classify a REF in the EFPA Overlay as a restricted development in Table 4 is strongly supported.

Assessment Provisions

Related to definitions, clarity is required in terms of scale of REFs envisaged, and which provisions apply to different scaled facilities. A range of different capacity solar power facilities are envisaged in the existing Primary Production Zone. That intent is not carried forward in the Rural Zone and must be addressed (refer **Attachment B**).

There is no 'medium' scale or 'large' scale capacity that might assist in determining is there is a case for additional Performance Assessed Development in Table 3. We note the EPA referrals adopt a capacity threshold eg a larger scale 30MW "electricity generating plant: or 'Energy storage facility" (other than a battery storage facility) requires a referral. In the context of a performance assessment framework, further work on what constitutes small, medium and large scale solar farms will assist.

Overlays

Infrastructure and Renewable Energy Facilities

The content is generally clear and consistent with existing provisions referred to in the assessment of REFs in current Development Plans.

Performance objectives discouraging “extensive security or perimeter fencing” are considered unrealistic given the substantial investment in solar power facilities of the kind proposed by Terregra Renewables require a secured compound. Security fencing is a requirement for insurance purposes. Without insurance the projects will not proceed.

The need for new landscape buffers and balancing bushfire risk management and overshadowing of panels requires assessment on a case by case basis. A requirement for landscaping around the perimeter of every solar power facility is unreasonable in the Rural zone where such development is envisaged, and where housing is relatively very low density. The need for landscaping will be very subjective (eg varying reviews on how much is enough, and that opinion varies from council to council), and if the cost is very prohibitive (eg one site boundary alone can be 350metres in length) then projects will not proceed.

Relying on the proposed setback from allotment boundaries and dwellings not on the host site, is preferred.

In most circumstances such facilities will be in relatively close proximity to power infrastructure (by necessity). It's our observation that existing aboveground infrastructure has a significantly greater visual impact/prominence compared to the solar panels mounted on structures.

Refer **Attachment C** for general comments in relation to the General Assessment provisions.

In summary, our interpretation of the draft Code is there is a policy gap in the Rural Zone for facilities near, but below the 5MW capacity, such as those approved Terregra Renewables solar farms. More definitions may result in opportunities to add *deemed to satisfy* provisions for smaller scale solar power facilities in Table 2 and or add a definition/category for *medium-scale* solar REFs in Table 3 Performance Assessed development. In any case, the Rural Zone does not adequately carry forward the potential for all scale and types of REF in the Rural Zone and this must be addressed.

I would be happy to arrange a meeting to discuss the above matters and the comments in the attachments if desired.

Please do not hesitate to contact the undersigned in relation to any matters related to this submission.

Yours sincerely



Julie Lewis RPIA
Senior Associate

Enc

Attachment A
DEFINITIONS AND OTHER TERMS

Land Use Term (Column A)	Definition (Column B)	Includes (Column C)	Excludes (Column D)	URPS Comment
<p>Renewable energy facility</p>	<p><i>Means land and/or water used to generate electricity from a renewable source such as wind, solar, tidal, hydropower, biomass and/or geothermal.</i></p> <p><i>This use may also include:</i></p> <p><i>(a) any associated facility for the storage and/or transmission of the generated electricity;</i></p> <p><i>(b) any building or structure used in connection with the generation of electricity.</i></p> <p><i>The use does not include a renewable energy facility principally used to supply and/or store electricity to an existing use of land that has a generating capacity less than 5MW (e.g., domestic solar panels, domestic wind generators, domestic battery storage).</i></p>	<p><i>Battery storage facility; Hydropower or pumped Hydropower facility; Solar power facility; Wave power generator; Wind farm.</i></p>		<p>The last paragraph in the Definition Column B could be used in Column D to more clearly define what is not captured by the definition.</p> <p>The reference to examples of what is not included only refers to ‘domestic’ facilities (but could be farm/horticulture based solar farms without any association with a dwelling); but the Terregra Renewables developments also generate <5MW, albeit they do not supply or store it for an existing use of land. The definition needs clarification.</p> <p>There appears to be a gap in guidance for medium-large scale solar farms.</p>
<p>OTHER TERMS USED IN THE CODE</p>				
<p>Small-scale ground mounted solar power facility</p>	<p>Terms used in Rural Zone provisions including Table 3</p>			<p>If the intention is that a solar power energy facility less than 5MW is ‘small scale’ then it should be defined. In the context of performance assessed, the more definitions and/or clarity within definitions, subjective terms such as</p>

Land Use Term (Column A)	Definition (Column B)	Includes (Column C)	Excludes (Column D)	URPS Comment
Solar Photovoltaic Panels (roof mounted)	A term used to describe a class of development in Rural Zone Table 1 – Accepted Development Classification			It is noted that the 5MW upper limit applies under Table 1. This is consistent with the generating capacity of Terregra Renewables approved facilities, that are ground mounted, hence the 5MW could be a ‘small-scale’ threshold for ground mounted solar facilities that are connected to the state’s power system (eg linked to the term ‘small-scale ground mounted solar power facility’ in Table 3.
Solar Photovoltaic Panels (ground mounted)	A term used to describe a class of development in Rural Zone Table 1 – Accepted Development Classification			This is form of small-scale domestic ground mounted solar facility (30KW or less) that could be added to REF definition Column 3 “Excludes”.

Attachment B

RURAL ZONE ASSESSMENT PROVISIONS

Desired Outcomes	Comments
<p>Desired Outcomes (DO) DO 1 A zone supporting the economic prosperity of South Australia primarily through the production, processing, storage and distribution of primary produce, forestry and the generation of energy from renewable sources.</p>	<p>Supported. The Rural Zone DO1 approximately transitions current Development Plan objectives that envisage this form of development.</p>
<p>Desired Outcomes (DO) DO 2 A zone supporting diversification of existing businesses that promote value adding, such as industry, storage and warehousing activities, the sale and consumption of primary produce, tourist development and accommodation.</p>	<p>Solar power energy facilities, particularly those <5MW are also a type of development that are value adding to farm income and/or provide income where economic primary production has ceased or is not sustainable on smaller sized land holdings.</p>
<p>Performance Outcomes and Deemed to Satisfy / Designated Performance Outcome Criteria Land Use and Intensity PO 1.1 The productive value of rural land for a range of primary production activities and associated value adding, processing, warehousing and distribution is supported, protected and maintained. DTS/DPF 1.1 Development comprises one or more of the following land uses: (t) Small-scale ground mounted solar power facility</p>	<p>There is currently no definition or guidance to determine ‘small-scale’ renewable energy facilities (REFs) are envisaged in DO1, but only ‘small-scale ground mounted solar power facilities listed as a land use in DPF1.1. It is not clear if larger scale REFs or other types such as wind farms are a desired land use.</p>
<p>Renewable Energy Facilities PO 9.1 Renewable energy facilities and ancillary development minimises significant fragmentation or displacement of existing primary production. DTS/DPF 9.1 None are applicable.</p>	<p>If REFs are different from ‘solar power facilities’ ie because the policy implies small scale ground mounted solar power facilities are 30kw or less, even though under the same broad heading, then clarification through more definitions is required.</p>

Desired Outcomes	Comments
<p>PO 9.2 Small-scale ground mounted solar power facilities support rural production or value adding industries.</p> <p>DTS/DPF 9.2 Solar power facilities:</p> <ul style="list-style-type: none"> (a) do not generate more than 30KW; (b) generate power which is to be used wholly in association with a primary production industry, a value adding industry or local infrastructure facility on the same allotment; (c) do not have a panel size exceeding 80m² or 4m in height per structure; (d) do not involve more than 2 panel structures per allotment; (e) are setback at least 10m from adjoining allotments in other ownership; and (f) are not located within 100m of a dwelling in other ownership. 	<p>The Terregra Renewables approved solar facilities are potentially not captured by this terminology but are potentially considered ‘small-scale’. Additional definitions for certainty are recommended.</p> <p>It is not clear if every solar facility above 30KW is not small-scale. If such a facility exceeds this capacity, is it only assessed under the General Assessment provisions (refer Attachment C) and based on the draft >5MW is not envisaged.</p> <p>Part (c) is not clear if there can be a number of panels on one structure that do not exceed a combined area of 80m².</p> <p>If these KW and m² and height thresholds relate to ‘small-scale’ then a definition – distinguishable from an REF – is required.</p> <p>One distinction is that REFs are of a commercial nature (in terms of energy production) but ‘solar power facilities’ are not.</p>
<p>Built Form and Character</p> <p>PO 10.1 Large buildings designed and sited to reduce impacts on scenic and rural vistas by:</p> <ul style="list-style-type: none"> (a) having substantial setbacks from boundaries and adjacent public roads; (b) using low reflective materials and finishes that blend with the surrounding landscape; and (c) being located below ridgelines <p>DTS/DPF 10.1 None are applicable.</p>	<p>In our experience, solar farms can be interpreted as ‘large buildings’ and ‘reflective’.</p> <p>As there are ‘Infrastructure and REF’ specific assessment provisions applying to ‘visual amenity’ it is desirable that P010.1 excludes infrastructure and REFs.</p>
<p>Procedural Matters (PM)</p> <p>Notification All classes of performance assessed development are excluded from notification except where they involve any of the following:</p> <ul style="list-style-type: none"> (b) development identified as “all other code assessed development” in Rural Zone Table 3 (e) renewable energy facilities other than a solar power facility that does not generate more than 30KW 	<p>Part (b) will include the Terregra Renewables <5MW facilities that currently require public notification under the current Murray Bridge Development Plan. In this context, the Code notification requirements are supported as they are not more onerous than existing notification procedures.</p> <p>Part (e) relates to a team/capacity that is used in Table 1 – Accepted Development. In this context it is assumed any form of roof mounted solar panels that do not satisfy Table 1 criteria (1-3) eg 5MW or greater will be publicly notified?</p>

Attachment C
INFRASTRUCTURE & RENEWABLE ENERGY FACILITIES

Desired Outcomes	Comments
<p>Assessment Provisions (AP) Desired Outcomes (DO) DO 1 Efficient provision of infrastructure networks and services, renewable energy facilities and ancillary development in a manner that minimises hazard, is environmentally and culturally sensitive and that suitably manages adverse visual impacts on natural and rural landscapes and residential amenity.</p>	<p>Outcome generally supported.</p>
<p>Performance Outcomes and Deemed to Satisfy / Designated Performance Outcome Criteria General PO 1.1 Development located and designed to minimise hazard or nuisance to adjacent development and land uses. DTS/DPF 1.1 None are applicable.</p>	<p>Outcome generally supported.</p>
<p>Visual Amenity PO 2.1 The visual impact of above ground infrastructure networks and services, renewable energy facilities (excluding wind farms), energy storage facilities and ancillary development from townships, scenic routes and public roads is minimised and managed by:</p> <ul style="list-style-type: none"> (a) utilising features of the natural landscape to obscure views where practicable; (b) siting development below ridgelines where practicable; (c) avoiding visually sensitive and significant landscapes; (d) using materials and finishes with low reflectivity and colours that complement the surroundings; (e) using existing vegetation to screen buildings; and (f) incorporating landscaping or landscaped mounding around the perimeter of a site and between adjacent allotments accommodating or zoned to primarily accommodate sensitive receivers. <p>DTS/DPF 2.1 None are applicable.</p>	<p>Generally supported. Note that (d) ‘<i>low reflectivity</i>’ is assumed this will capture solar panels that are designed to absorb light rather than unreasonably reflect light.</p> <p>In relation to part (f) it is assumed a Rural Zone is <u>not</u> comprised of allotments zoned to “<i>primarily accommodate sensitive receivers</i>”.</p>

Desired Outcomes	Comments
<p>PO 2.2 Substations, pumping stations, battery storage facilities, maintenance sheds and other ancillary structures incorporate vegetation buffers to reduce adverse visual impacts on adjacent land.</p> <p>DTS/DPF 2.2 None are applicable.</p>	<p>Noted, though setbacks can assist in reducing adverse visual impacts, not just vegetation.</p>
<p>PO 2.3 Surfaces exposed by earthworks associated with installation of storage facilities, pipework, penstock, substations and other ancillary plant are reinstated and revegetated to reduce adverse visual impacts on adjacent land.</p> <p>DTS/DPF 2.3 None are applicable.</p>	<p>Noted</p>
<p>Rehabilitation</p> <p>PO 3.1 Progressive rehabilitation (incorporating revegetation) of disturbed areas, ahead of or upon decommissioning of areas used for renewable energy facilities and transmission corridors.</p> <p>DTS/DPF 3.1 None are applicable.</p>	<p>Noted, although previously cleared farming land may not require revegetation other than reinstated as primary production land.</p>
<p>Hazard Management</p> <p>PO 4.1 Infrastructure and renewable energy facilities and ancillary development located and operated to not adversely impact maritime or air transport safety, including the operation of ports, airfields and landing strips.</p> <p>DTS/DPF 4.1 None are applicable.</p>	<p>Noted</p>
<p>PO 4.2 Facilities for energy generating, power storage and transmission separated from dwellings, tourist accommodation and frequently visited public places (such as viewing platforms / lookouts) to reduce risks to public safety from fire or equipment malfunction.</p> <p>DTS/DPF 4.2 None are applicable.</p>	<p>Noted</p>

Desired Outcomes	Comments
<p>PO 4.3 Bushfire hazard risk minimised for renewable energy facilities by providing appropriate access tracks, safety equipment, and water tanks and establishing cleared areas around substations, battery storage and operations compounds.</p> <p>DTS/DPF 4.3 None are applicable.</p>	<p>Generally supported although it's noted that any requirement for vegetation buffers should therefore be balanced against managing bushfire risk hazard.</p>
<p>Electricity Infrastructure and Battery Storage Facilities</p> <p>PO 5.1 Electricity infrastructure located to minimise visual impacts through techniques including:</p> <ul style="list-style-type: none"> (i) siting utilities and services: (i) on areas already cleared of native vegetation; or (ii) where there is minimal interference or disturbance to existing native vegetation or biodiversity; and (j) grouping utility buildings and structures with non-residential development, where practicable. <p>DTS/DPF 5.1 None are applicable.</p>	<p>Noted</p>
<p>PO 5.2 Electricity supply (excluding transmission lines) serving new development in urban areas and townships installed underground, excluding lines having a capacity exceeding or equal to 33kV.</p> <p>DTS/DPF 5.2 None are applicable.</p>	<p>Noted</p>
<p>PO 5.3 Battery storage facilities co-located with substation infrastructure where practicable to minimise the development footprint and reduce environmental impacts.</p> <p>DTS/DPF 5.3 None are applicable.</p>	<p>Noted. – The sites selected by Terregra Renewables for solar farms are close to the grid they are connected to which is desirable in economic terms. This could also be reflected in the provisions for REFs.</p>

Desired Outcomes	Comments
<p>Renewable Energy Facilities (Solar Power)</p> <p>PO 9.1 Solar power facilities generating 5MW or more are not located on land of high environmental, scenic or cultural value.</p> <p>DTS/DPF 9.1 None are applicable.</p>	<p>Noted. There may be specific overlays that could be identified as areas to avoid (eg those identified in Rural Zone Table 4).</p>
<p>PO 9.2 Solar power facilities allow for movement of wildlife by:</p> <ul style="list-style-type: none"> (f) incorporating wildlife corridors and habitat refuges; and (g) avoiding the use of extensive security or perimeter fencing; or (h) incorporating fencing that enables the passage of small animals without unreasonably compromising the security of the facility. <p>DTS/DPF 9.2 None are applicable.</p>	<p>Re-number (a), (b) and (c). Most forms of solar power facilities will require security fencing to all site boundaries. Interpreting 'extensive' will be open to debate.</p>
<p>PO 9.3 Amenity impacts of solar power facilities minimised through separation from sensitive receivers.</p> <p>DTS/DPF 9.3 Solar power facilities are setback at least:</p> <ul style="list-style-type: none"> (a) 500 metres from conservation areas; (b) 100 metres from Township, Settlement, Rural Neighbourhood and Rural Living Zones; and (c) 30 metres from adjoining land. 	<p>Provided Part (c) is just a guide, it is not unreasonable, but not all 'adjoining land' is a sensitive receiver. Recently approved solar farms have been acceptable in terms of lesser setbacks having regard to the site's context in the Rural Zone and use of adjoining allotments.</p> <p>Clarification of whether PO9.3 and DPF9.3 applies to only solar power facilities >5MW is required.</p> <p>Note there is some conflict with Rural Zone DTS/DPF9.2 in relation to setback from adjoining allotments in other ownership. A setback of 10m is consistent with the minimum (but varied) setbacks approved in some recent development applications in the Primary Production Zone.</p>

Desired Outcomes	Comments
<p>PO 9.4 Solar power facilities incorporate landscaping within setbacks from adjacent road frontages and boundaries of adjacent allotments accommodating non-host dwellings.</p> <p>DTS/DPF 9.4 None are applicable.</p>	<p>In some cases, sections of solid fencing have been acceptable on or adjacent boundaries of adjoining allotments accommodating non-host dwellings.</p> <p>Landscaping can conflict with solar access or it is not required where substantial read side vegetation exists in read reserves.</p> <p>It is desired there is no minimum setback from a road boundary in the Code for REFs as it will be appropriately assessed on a case by case basis.</p>
<p>Temporary Facilities</p> <p>PO 13.1 In rural and remote locations, development that is likely to generate significant waste material during construction, including packaging waste, makes provision for a temporary on-site waste storage enclosure to minimise the incidence of wind-blown litter.</p> <p>DTS/DPF 13.1 A waste collection and disposal service will be used to dispose of the volume of waste and at a rate it is generated.</p>	<p>Noted. This is generally managed via Construction Environment Management Plans, rather than being tied to the suitability of the land use and planning/development assessment matters.</p>
<p>PO 13.2 Temporary facilities to support the establishment of renewable energy facilities (including borrow pits, concrete batching plants, laydown, storage, access roads and worker amenity areas) are sited and operated to minimise environmental impact.</p> <p>DTS/DPF 13.2 None are applicable.</p>	<p>Noted.</p>