9.3.18 Utility code

9.3.18.1 Application

This code applies to assessable development identified as requiring assessment against the Utility code by the tables of assessment in **Part 5 (Tables of assessment)**.

9.3.18.2 Purpose and overall outcomes

(1) The purpose of the Utility code is to ensure major utilities and other large scale infrastructure projects are provided in a co-ordinated and efficient way and are developed in a manner which effectively services and protects local communities and avoids significant adverse impacts on the environment.

(2) The purpose of the Utility code will be achieved through the following overall outcomes:-

(a) major utility infrastructure and facilities are provided in a co-ordinated and efficient manner;

(b) major utility infrastructure and facilities avoid or otherwise minimise adverse impacts on the natural environment, important landscape elements and local communities;

(c) major utility infrastructure and facilities maximise the efficient use of natural resources, including water and energy and where providing essential community service infrastructure, are resilient to flood events.

9.3.18.3 Assessment benchmarks

Table 9.3.18.3.1 Assessment benchmarks for assessable development

Performance outcomes		Acceptable outcomes	
Location and site suitability			
PO1	The utility is located and sited such that:- (a) it is well placed relative to the infrastructure network that it services; (b) opportunities for cost efficiencies are maximised; (c) environmental and social impacts are minimised; and (d) a high standard of accessibility is available for maintenance purposes and at times of emergency.	**AO1.1** **AO1.2** **AO1.3** **AO1.4**	The utility is established on a site that is well located such that it can efficiently service the supply or distribution network. Where practicable, the utility is co-located with another utility of a similar or compatible type. Easements for access to the utility are granted to the Council or the beneficiary of the easement to ensure suitable access can be gained. The utility is located in a position where it can be easily accessed for maintenance purposes or at times of emergency.
Protection of visual amenity and landscape character			
PO2	As far as is reasonably practicable, having regard to the nature and scale of the facility, the utility is located to be visually integrated with its rural, natural or townscape setting.	**AO2**	No acceptable outcome provided.
PO3	The utility provides an attractive street front address with unsightly elements screened from view by walls and landscape buffers.	**AO3**	No acceptable outcome provided.

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Performance outcomes		Acceptable outcomes	
Water, energy and waste use efficiency			
PO4	The utility is designed, constructed and operated in a manner that:- (a) minimises energy use and greenhouse gas emissions; (b) minimises the use of water; and (c) maximises the re-use and recycling of by-products associated with the operation of the utility.	**AO4**	No acceptable outcome provided.
Building siting and design			
PO5	The siting and design of any buildings or structures associated with the utility is compatible with the setting and character of the local area in which the facility is located.	**AO5**	No acceptable outcome provided.
Safety and security			
PO6	The utility is secure, public safety is protected, and potential damage from vandalism is minimised.	**AO6**	Warning information signs and security fencing are provided around the site to prevent unauthorised entry to those parts of the facility that are not intended to be publicly accessible.
All electricity infrastructure			
PO7	The proposed infrastructure is located to minimise exposure on adjacent land to EMF from powerlines in accordance with the principle of prudent avoidance. Note—prudent avoidance is defined as "minimising, as appropriate, ELF magnetic field exposure provided this can be readily achieved without undue inconvenience and at reasonable expense." (ARPANSA draft standard 2008).	**AO7**	No acceptable outcome provided.
Substations or bulk supply substation infrastructure			
PO8	A substation is designed, constructed and maintained to attenuate and minimise noise emissions to surrounding land uses.	**AO8**	Noise emissions from a substation are in accordance with the limits set out in the *Environmental Protection (Noise) Policy 2008*.
PO9	The increase in intensity of use on an existing substation site does not result in an unacceptable cumulative impact on surrounding land uses.	**AO9**	Where upgrading an existing substation to a bulk supply substation, the existing substation is:- (a) in a location where viable corridors are accessible to connect powerline infrastructure to the site; and (b) in close proximity to existing powerline infrastructure to minimise the need for additional powerline infrastructure.
Powerline infrastructure			
PO10	Overhead powerline infrastructure is located and positioned to maintain safe clearances to adjacent land uses and vegetation.	**AO10**	Overhead powerline infrastructure maintains mandatory clearances from buildings, structures, and operational equipment in accordance with Schedule 4 and 5 of the *Electrical Safety Regulations 2002*.
PO11	Underground powerline infrastructure is located to prevent adverse impacts on existing transport or utility infrastructure.	**AO11**	No acceptable outcome provided.
Recommended flood level			
PO12	The functioning of a utility installation that is essential community service infrastructure is maintained during and immediately after flood and storm tide	**AO12**	A utility installation that is essential community service infrastructure is:- (a) located in an area that is above the recommended flood levels

Performance outcomes		Acceptable outcomes	
	inundation events. Editor's note—essential community service infrastructure is defined in **Schedule 1 (Definitions)**.		identified in **Table 9.3.18.3.2** (**Recommended flood level for a utility installation that is essential community service infrastructure)**; and (b) located and designed to ensure any components of the infrastructure that are likely to fail to function or may result in contamination when inundated by floodwaters (e.g. electrical switchgear and motors, water supply pipeline air valves) are:- (i) located above the recommended flood level; or (ii) designed and constructed to exclude floodwater intrusion/infiltration.

Table 9.3.18.3.2 Recommended flood level for a utility that is essential community service infrastructure

Type of utility	Recommended flood level
Major switch yards and substations (refer to note)	0.5% average recurrence interval (ARI)
Power stations	0.2% ARI
Sewerage treatment plants (refer to note)	0.01% ARI
Water treatment plants (refer to note)	0.5% ARI
o Works of an electricity entity not otherwise listed in this table o Communication network facilities	No specific recommended flood level but development proponents should ensure that the infrastructure is optimally located and designed to achieve suitable levels of service, having regard to the processes and policies of the administering government agency.

Note—the recommended flood level applies only to electrical and other equipment that, if damaged by floodwater or debris, would prevent the infrastructure from functioning. This equipment should either be protected from damage or designed to withstand inundation.

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