

NUMBER	MODEL PROVISIONS	FOOTNOTES TO MODEL PROVISIONS	PURPOSE / HISTORY	EXAMPLE OF WHERE THIS HAS BEEN USED
DISTRICT ISSUES				
1	The operation, maintenance, upgrading and development of network utilities supports the economic and social wellbeing of the district, recognising that this infrastructure may create adverse effects on the environment.			
2	Inappropriate subdivision, use and development can adversely affect the safe and efficient functioning of significant infrastructure including the National Grid.			
DISTRICT OBJECTIVES				
1	Enable the operation, maintenance, upgrading and development of the National Grid, whilst managing any adverse effects on the environment.	Note comments on WDC document regarding the "seek to avoid" language for outstanding natural landscapes and the coast.		Proposed Hamilton District Plan (appeals version), Objective 25.7.2.4
2	Manage subdivision, use and development to ensure that the operation, maintenance, upgrading and development of the National Grid is not compromised.	We've used the word "manage" here to reflect the range of approaches adopted within lower order provisions to protect the National Grid while recognising that there are a number of compatible activities that can take place within close proximity to it.		Aligns with the Transpower and Council agreed position the Proposed Auckland Unitary Plan
DISTRICT POLICIES				
1	Provide for the operation, maintenance, upgrading and development of network utilities, including the National Grid, by recognising their operational, functional and technical constraints, the complexity of the interconnectedness of networks, and their role in servicing existing and planned development		NPSET Policies 1 and 3	
2	Recognise the benefits provided by network utilities to people and communities, and require these to be weighed in assessing the adverse effects of proposals.			
3	Recognise that significant infrastructure including the National Grid may require a location within sensitive natural environments where there are no practicable alternatives available, and the infrastructure will result in significant social and/or economic benefits.			
4	Avoid, remedy or mitigate the adverse effects arising from the operation, maintenance, upgrading and development of network utilities, including the National Grid. <u>OR</u> Require the operation, maintenance, upgrading and development of network utilities, including the National Grid, to avoid, remedy or mitigate adverse effects, including on: (a) the health, well-being and safety of people and communities, including nuisance from noise, vibration, dust and odour emissions and light spill; (b) the safe and efficient operation of other network utilities; (c) amenity values; (d) any heritage, cultural or natural environment values.	Two options are provided depending on the drafting style of the plan. This policy can be adapted to suit the approach in the district plan.		
5	Manage the effects of subdivision, development and land use to ensure that the operation, maintenance, upgrading and development of the National Grid is not compromised by:			
	5A Avoiding sensitive activities and intensive land uses establishing within National Grid Yards, and ensuring that these are appropriately managed around substations;			
	5B Managing the location of development around National Grid transmission lines to ensure that the safety and efficiency of the National Grid is not compromised; and			
	5C Managing subdivision in the National Grid Corridor to ensure that subsequent land use does not compromise the operation, maintenance, upgrading and development of the National Grid.			
DISTRICT PLAN METHODS (National Grid Specific)				

1	The National Grid transmission network will be identified on the Planning Maps.	
2	The Council will consult Transpower in applying the policies relating to the National Grid as part of the development of any district plan reviews, plan changes, structure plans or development strategies and development proposals (including designations where these have the potential to adversely affect the National Grid).	Based on MfE Implementation Guidance - Method D3.1.
3	Provide cross referencing in the Network Utilities section to the <i>Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009</i> .	
4	Designated network utilities will be identified on the Planning Maps.	
5	National Grid Yards and associated rules to restrict buildings and structures, earthworks, sensitive activities and intensive land uses near to National Grid transmission lines will be included in the District Plan.	
6	National Grid Corridors to cover the area influenced by line swing in high wind conditions near National Grid transmission lines, and associated rules to enable subdivision to be managed in these areas, will be included in the District Plan.	

RULES – ALL ZONES (District wide) (AZ)

NETWORK UTILITIES/INFRASTRUCTURE AND ENERGY

Plan Structure	Transpower does not have a particular preference on whether network utility/Transpower buffer corridor provisions are addressed in a district-wide section or on a zone by zone basis, provided there is adequate cross referencing to clearly identify when Transpower buffer corridor provisions apply.	Transpower buffer corridor provisions are provided in each individual zone in the Western Bay of Plenty District Plan, but in a standalone 'overlay' section in the Proposed Auckland Unitary Plan. Most district plans include the enabling network utilities rules in a district wide section, although this is not always the case (e.g. Whangarei District Plan, Proposed Thames Coromandel District Plan).
Note to Plan User	The <i>Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009</i> contain rules for the operation, maintenance, upgrading, relocation, or removal of an existing transmission line that is part of the National Grid, as defined in the Regulation. This applies instead of the District Plan rules in relation to the National Grid.	

Permitted Activities

NA	Enabling provisions for National Grid Infrastructure - ensure that	
AZ1	Vegetation trimming of any scheduled tree or protected vegetation required to comply with the Electricity (Hazards from Trees) Regulations 2003 up to the growth limit zone.	

Restricted Discretionary Activities

AZ2	Any activity that does not comply with the standards for permitted activities.	
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Discretionary Activities

AZ3

Any activity that is otherwise not specified as a controlled activity, restricted discretionary activity, or non complying activity.

EARTHWORKS, QUARRIES AND LANDFILLS

Permitted Activities

AZ4	Earthworks within the National Grid Yard, subject to compliance with the following standards:		Hamilton Ruakura Plan Change (operative) and Proposed Hamilton District Plan (appeals version).
(a)	<p>For National Grid support poles and any stay wires:</p> <ul style="list-style-type: none"> • depth shall be no greater than 300mm within 2.2m of the pole or stay wire; or • depth shall be no greater than 750mm between 2.2m and 5m of the pole or stay wire. <p>For National Grid support towers (including any tubular steel tower that replaces a steel lattice tower):</p> <ul style="list-style-type: none"> • depth shall be no greater than 300mm within 6m of the outer edge of the visible foundation of the tower; or • depth shall be no greater than 3m between 6m and 12m of the outer edge of the visible foundation of the tower; and 	Aligns with NZECP34:2001	Hamilton Ruakura Plan Change (operative)
(b)	Shall not compromise the stability of a National Grid support structure; and	Aligns with NZECP34:2001, 2.2.1(c) and 2.2.3(c)	Hamilton Ruakura Plan Change (operative) and Proposed Hamilton District Plan (appeals version), WBOP (from consent order)
(c)	Shall not result in loss of practical access to any National Grid support structure.	To ensure that any earthworks do no sever existing practical access to support structures to enable ongoing maintenance.	
(d)	Shall not result in a reduction in the ground to conductor clearance distances below what is required by Table 4 of NZECP34.	Aligns with NZECP34:2001	Hamilton Ruakura Plan Change (operative) and Proposed Hamilton District Plan (appeals version).

Exemptions

	<p>Provided that, the following are exempt from point (a) above:</p> <ul style="list-style-type: none"> • Earthworks that are undertaken by a network utility operator (other than for the reticulation and storage of water for irrigation purposes) as defined by the RMA. 	Network utility operators will still need an exemption from Transpower under NZECP34 if they breach any of the requirements.	Proposed Auckland Unitary Plan
	<ul style="list-style-type: none"> • Earthworks undertaken as part of agricultural or domestic cultivation, or repair, sealing or resealing of a road, footpath, driveway or farm track. • Vertical holes not exceeding 500mm in diameter are exempt provided they: 		
i)	are more than 1.5m from the outer edge of pole support structure or stay wire; or	Aligns with NZECP34:2001 2.2.4	
ii)	are a post hole for a farm fence or horticulture structure more than 6m from the visible outer edge of a tower support structure foundation	Aligns with NZECP34:2001 2.2.1	
	•Earthworks for which a dispensation has been granted by Transpower under NZECP34:2001.	Post holes considered unlikely to destabilise support structures. To avoid unnecessary RMA consents being sought where dispensation by Transpower already granted.	

Restricted Discretionary Activities

AZ5	<p>Within the National Grid Yard:</p> <p>(a) Any earthworks not permitted by Rule AZ4(a) above (permitted activity rules).</p>	Earthworks infringing AZ3(a) may be able to be suitably engineered to ensure support structures are not adversely affected and practical access is retained.	Hamilton Ruakura Plan Change (operative) and Proposed Hamilton District Plan (appeals version), Whakatane District Plan (appeals version)
AZ6	On sites containing National Grid support structures:		

	<p>(a) Any quarry or landfill activity on the same site as any National Grid transmission line support structures.</p>	<p>Consistent with Christchurch Replacement Plan.</p>	<p>Rule included to enable Transpower to address possible severance of access to support structures from work outside of the National Grid Yard (e.g. creating an inaccessible island).</p>
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Non-Complying Activities

<p>AZ7</p>	<p>Within the National Grid Yard: (a) Any earthworks not permitted by Rules AZ4(b), AZ4(c) and AZ4(d) above (permitted activity rules).</p>		
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SUBDIVISION

Restricted Discretionary Activities

<p>AZ8</p>	<p>Subdivision of land in any zone within the National Grid Corridor</p> <p>(a) In all existing urban zones [define as relevant to the particular district plan as applicable to the EUZ corridor rules below] all allotments intended to contain a sensitive activity shall provide a building platform, to be located outside of the National Grid Yard, other than where the allotments are for roads, accessways and networks utilities.</p> <p>(b) In all non-urban zones [define as relevant to the district plan as applicable to the OZ corridor rules below] all allotments shall provide a building platform for the likely principal building(s) and any building(s) for sensitive activities, to be located outside the National Grid Yard, other than where the allotments are for roads, accessways and networks utilities.</p> <p>(c) The layout of allotments and any enabling earthworks shall ensure that physical access is maintained to any National Grid Support structures located on the allotments including any balance area.</p>		<p>Hamilton Ruakura Plan Change operative) and Proposed Hamilton District Plan (appeals version), WBOP (consent order)</p>
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<p>AZ9</p>	<p>Any subdivision of land in any zone within the National Grid Corridor which does not comply with the restricted discretionary activity standards (a), (b) and (b) under Rule AZ8.</p>		<p>Hamilton Ruakura Plan Change operative) and Proposed Hamilton District Plan (appeals version), WBOP (consent order) in regard to clause (a)</p>
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RULES – BUILDINGS, STRUCTURES AND SENSITIVE ACTIVITIES IN EXISTING URBAN ZONES [INSERT DATE WHEN CORRIDOR RULES FIRST INCLUDED IN DISTRICT PLAN INCLUDING PREVIOUS REVIEWS OR PLAN CHANGES, OR ALTERNATIVELY BY USE OF MAPPING TO DEFINE EXISTING URBAN AREAS] (EUZ)

Permitted Activities

<p>EUZ1</p> <p>1</p>	<p>Within the National Grid Yard</p> <p>Under the National Grid Conductors (wires):</p> <p>(a) On all sites the following buildings and structures are permitted activities within the National Grid Yards:</p> <p>(i) Building alterations and additions to an existing building or structure for a sensitive activity that does not involve an increase in the building height or footprint.</p> <p>(ii) Buildings and structures that are not for a sensitive activity.</p> <p>(iii) Network Utilities (other than for the reticulation and storage of water for irrigation purposes) undertaken by network utility operators as defined in the RMA.</p> <p>(b) All buildings or structures permitted by (a) must comply with the following condition:</p> <p>(i) Demonstrate that safe electrical clearance distances required by NZECP34:2001 are maintained under all National Grid transmission line operating conditions.</p> <p>Around National Grid support structures:</p>	<p>Buildings and structures that are not for a sensitive activity. Note: "Existing Urban" rules apply to areas that are underbuilt already, and that these areas are tagged to identify that the rules apply as at a certain date e.g. by aerial photo, maps etc.</p>	<p>To recognise underbuild has already occurred in many existing urban areas, and accordingly some more flexibility is appropriate compared to non-urban and newly urbanising areas where there is more flexibility to design around the lines and the National Grid Yard.</p> <p>Acknowledges that underbuild of sensitive activities may already have occurred.</p> <p>Hamilton District Plan (appeals version)</p> <p>Proposed Whakatane District Plan (appeals version).</p>
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- (a) Buildings and structures shall be at least 12m from a the outer visible foundation of any National Grid tower and from any pole and associated stay wire unless it is one of the following:
 - (i) Network Utilities (other than for the reticulation and storage of water for irrigation purposes) undertaken by network utility operators as defined in the RMA.
 - (ii) Fences no greater than 2.5m high and no closer than 5m from the nearest National Grid Pole or 6m from the nearest National Grid Tower.
- (b) A building or structure where Transpower has given written approval in accordance with clause 2.4.1 of NZECP34:2001.

NZCEP34 only requires an 8m set back from poles in terms of safety, so the greater 12m requirement is more to do with maintenance access in the model provisions.

Non-Complying Activities

EUZ2

- Within the National Grid Yard
 - (a) Any new building for a sensitive activity.
 - (b) Any change of use to a sensitive activity or the establishment of a new sensitive activity.
 - (c) Any hazardous facility that involves the storage and handling of hazardous substances with explosive or flammable intrinsic properties [exceeding the aggregate quantity or HFSP permitted activity quantity or threshold in the Hazardous Substances section of the District Plan] within 12m of the centreline of a National Grid Transmission Line.
 - (d) Any building or structure not permitted by Rules EUA1 (above permitted activity rules).

Evidence of David Le Marquand on behalf of oil companies for Proposed CHCH Replacement Plan. In CHCH a 10m set back was provided from the centreline from any 66kV line which can be added where appropriate for a particular District or City.

RULES – BUILDING, STRUCTURES AND SENSITIVE ACTIVITIES IN ALL OTHER ZONES INCLUDING NEW URBAN ZONES HAVING LEGAL EFFECT AFTER [[INSERT DATE WHEN CORRIDOR RULES FIRST INCLUDED IN DISTRICT PLAN, INCLUDING PREVIOUS REVIEWS OR PLAN CHANGES] (OZ)

Permitted Activities

OZ1

1

- Within the National Grid Yard
 - Under the National Grid conductors (wires):
 - (a) On all sites the following buildings and structures are permitted in the National Grid Yard:
 - (i) Building alterations and additions to an existing building or structure that does not involve an increase in the building height or footprint.
 - (ii) Network Utilities (other than for the reticulation and storage of water for irrigation purposes) undertaken by network utility operators as defined in the RMA.
 - (iii) Non-habitable building or structure for farming activities in rural zones, (but not including any intensive farming buildings, commercial greenhouses and milking/dairy sheds)
 - (iv) Yards for milking/dairy sheds
 - (v) Artificial crop protection and support structures.
 - (b) All buildings or structures permitted by a) must comply with the following condition:
 - (i) Demonstrate that safe electrical clearance distances required by NZECP34:2001 are maintained under all National Grid line operating conditions.

WBOP District Plan/Whanganui consent order.

WBOP District Plan/Whanganui consent order.

2

- Around National Grid support structures
 - (a) Buildings and structures shall be at least 12m from a the outer visible foundation of any National Grid tower and from any pole and associated stay wire unless it is one of the following:
 - (i) Network Utilities (other than for the reticulation and storage of water for irrigation purposes) undertaken by network utility operators as defined in the RMA.
 - (ii) Fences no greater than 2.5m high and no closer than 5m from the nearest National Grid Pole or 6m from the nearest National Grid Tower.
 - (iii) Artificial crop protection and support structure between 8m and 12m from a single pole support structure and any associated guy wire (but not tower) that:

Whanganui consent order

Set out in Horticulture NZ MOU dated 9 May 2013. Essentially acknowledged that horticultural structures are low and could be removed or conductor placed on them when work being done.

WBOP District Plan/consent order, Whanganui consent order.

- Meets the requirements of NZECP34:2001 for separation distances from the conductor;

- Is no more than 2.5m high;
- Is removable or temporary, to allow a clear working space 12 metres from the pole when necessary for maintenance and emergency repair purposes; and

- Allows all weather access to the pole and a sufficient area for maintenance equipment, including a crane.

(b) A building or structure where Transpower has given written approval in accordance with clause 2.4.1 of NZECP34:2001.

Non-Complying Activities

OZ2

Within the National Grid Yard:

- (a) Any new building for a sensitive activity.
- (b) Any change of use to a sensitive activity or the establishment of a new sensitive activity.
- (c) Dairy/milking sheds or buildings for intensive farming
- (d) Any new hazardous facility that involves the storage and handling of hazardous substances with explosive or flammable intrinsic properties [exceeding the aggregate quantity or HFSP permitted activity quantity or threshold in the Hazardous Substances section of the District Plan] within 12m of the centreline of a National Grid Transmission Line.
- (e) Any building or, structure not permitted by Rule OZ1 above (permitted activity rules).

Evidence of David Le Marquand on behalf of oil companies for Proposed CHCH Replacement Plan. In CHCH a 10m set back was provided from the centreline from any 66kV line which can be added where appropriate for a particular District or City.

Necessary to ensure new non-rural buildings do not establish.

ADVICE NOTES

Note: Vegetation to be planted around the National Grid should be selected and/or managed to ensure that it will not result in that vegetation breaching the Electricity (Hazards from Trees) Regulations 2003.

Note: The New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001) contains restrictions on the location of structures and activities in relation to electricity lines including transmission lines, and it is mandatory to comply with it. Compliance with the permitted activity standards of the Plan does not ensure compliance with the NZECP34:2001.

NOTIFICATION STATEMENT

Where an activity requires resource consent solely because it is within a National Grid Corridor or National Grid Yard then the application need not be publicly notified and need not be served on any affected party apart from Transpower New Zealand Limited who will be considered an affected party.

Operative Ruakura Plan Change - Hamilton District Plan, Proposed Hamilton District Plan (appeals version).

ASSESSMENT CRITERIA – RESTRICTED DISCRETIONARY ACTIVITIES

EARTHWORKS WITHIN 12M OF A NATIONAL GRID SUPPORT STRUCTURE, QUARRIES AND LANDFILLS

- Matters of discretion**
- (a) Impacts on the operation, maintenance, upgrading and development of the National Grid.
 - (b) The risk to the structural integrity of the affected National Grid support structure(s).
 - (c) Any impact on the ability of the National Grid owner (Transpower) to access the National Grid.
 - (d) The risk of electrical hazards affecting public or individual safety, and the risk of property damage.

- Assessment criteria (may not be necessary - will depend on plan structure)**
- (a) The extent of any adverse effects on the ability of the Transpower to operate, maintain, upgrade and develop the National Grid transmission network; including access to the line.
 - (b) Whether it is reasonable and practical to comply with NZECP34:2001.
 - (c) The extent of any risk to the structural integrity of the National Grid.
 - (d) The extent of any risk of electrical hazards adversely affecting public or individual safety, and the risk of property damage.

SUBDIVISION WITHIN THE NATIONAL GRID CORRIDOR

- Matters of discretion**
- (a) The subdivision layout and design in regard to how this may impact on the operation, maintenance, upgrading and development of the National Grid.
 - (b) The ability to provide a complying building platform outside of the National Grid Yard
 - (c) The risk of electrical hazards affecting public or individual safety, and the risk of property damage.
 - (d) The nature and location of any vegetation to be planted in the vicinity of National Grid transmission lines

Assessment criteria (may not be necessary)	<p>(a) The extent of any adverse effects on the ability of the Transpower to operate, maintain, upgrade and develop the National Grid transmission network; including access to the line.</p> <p>(b) The extent to which the design and construction of the subdivision allows for earthworks, buildings and structures to comply with NZECP34:2001.</p> <p>(c) The ability to provide a suitable building platform(s) outside of the National Grid Yard.</p> <p>(d) The extent to which the subdivision design and consequential development will minimise the potential for reverse sensitivity effects on the National Grid.</p>
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DEFINITIONS

Building	Note: Transpower has no firm view on the wording of the definition of 'building'. However, Transpower seeks to ensure that all rules applying to the National Grid Yards and Corridors apply to buildings and structures. If the District Plan does not include a definition of 'building' and/or refers to the Building Act definition, all rules above need to refer to "buildings and structures". If the definition of 'building' includes 'structures', then the rules do not need to refer to 'structures' as well.		
NZECP34:2001	Means the New Zealand Electrical Code of Practice for Electrical Safe Distances 34:2001 ISSN 0114-0663		
National Grid	means the same as in the National Policy Statement on Electricity Transmission 2008		
National Grid Yard (shown in red in diagram below)	<p>Means:</p> <ul style="list-style-type: none"> • the area located 12 metres in any direction from the outer edge of a National Grid support structure; and • the area located 10 metres either side of the centreline of an overhead 110kV National Grid line on single poles; or • the area located 12 metres either side of the centreline of any overhead National Grid line on pi poles or towers (including tubular steel towers where these replace steel lattice towers); <p>[insert red and green corridor diagram]</p>	Diagram can be customised for a particular district e.g. towers only or black & white. Where 66kV lines are present a suitable approach should be confirmed with Transpower.	
National Grid Corridor	<p>Means the area measured either side of the centreline of above ground National Grid transmission lines as follows:</p> <ul style="list-style-type: none"> • 14m for 110kV transmission lines on single poles; • 16m for 110kV transmission lines on pi poles; • 32m for 110kV transmission lines on towers (including tubular steel towers where these replace steel lattice towers); • 37m for 220kV transmission lines on towers (including tubular steel towers where these replace steel lattice towers); <p>[insert red and green corridor diagram]</p>		Operative Ruakura Plan Change - Hamilton City District Plan.
Pole	In relation to the National Grid has the same meaning as the definition in the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009.		
Sensitive activities	Means any school, residential building or hospital.	The NPSET has an inclusive definition that includes schools, residential buildings and hospitals, but does not preclude other activities that may be sensitive. The definitions of the particular plan will need to be reviewed to check if specific activities such as retirement homes or papakainga need to be included if not covered by the District Plan definition of residential activity or similar.	Proposed Whakatane District Plan (appeals version), operative Ruakura Plan Change - Hamilton City District Plan.
Tower	In relation to the National Grid has the same meaning as the definition in the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009.		
Transmission line	In relation to the National Grid has the same meaning as the definition in the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations, 2009.		
Transpower	Means the owner and operator of the National Grid - Transpower New Zealand Limited.		

PLANNING MAPS

Identify the existing National Grid assets on the Planning Maps

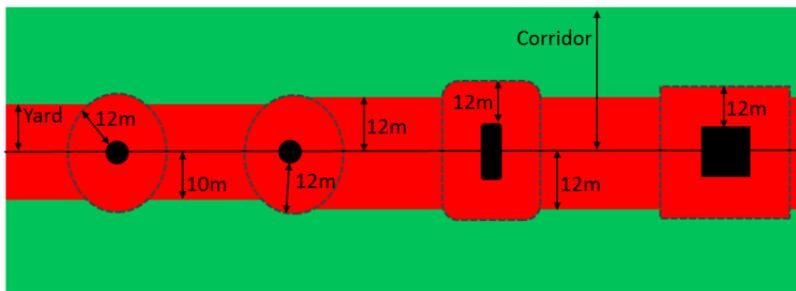
ADDITIONAL POINTS

No provision within the District Plan should make any activity in relation to the National Grid any more restrictive than Discretionary Activity status, such as within areas of natural hazard, landscapes, etc.

This relates to comments above re Policy 8 NPSET.

Any vegetation removal and/or trimming should be a permitted activity where required under the Electricity (Hazard from Trees) Regulations. Specific rules where this exclusion/exemption should apply should include Notable Tree, Significant Natural Areas, and Outstanding Landscapes.

Note issue with NESETA - if vegetation removal / trimming is controlled by a rule within the District Plan it can result in the National Grid vegetation trimming and removal being a discretionary activity which is more restrictive than other network utilities. Can discuss this further and provide more details.



LEGEND

Not to scale

- Centreline
- Single Pole
- ▬ Pi Pole
- Tower