

Part of Energy Queensland

## **Energex / Ergon Energy Network**

# Road Transport Operator Fact Sheet



#### LEGISLATIVE REQUIREMENTS

The *Electrical Safety Regulation 2013* ("the Regulation") prescribes exclusion zones and specific requirements for the performance of work in contact with, or near to, electrical parts.

Reference is made to the Electrical Safety Code of Practice 2020 - Working near overhead and underground electric lines, in particular, section 8 "Transportation of High Loads near Electric Lines".

All Road Transport Operators must first ensure that they have read and are familiar with the Electrical Safety Code of Practice 2020 - Working near overhead and underground electric lines, *Electrical Safety Act 2002 and Electrical Safety Regulation 2013* and consider their obligations for transporting or having responsibility within the process of managing a high load.

The Queensland Work Health and Safety Act 2011 defines what is "reasonably practicable" in ensuring health and safety.

This information is only applicable to Energex and Ergon Energy Network's assets and is not transferrable to assets belonging to other entities.

#### **DEFINITIONS**

Term	Definition			
Assessing	Checking the suitability of and the requirements necessary for, safe transport of a proposed high load by reference to the electricity entity's records. If this is not possible, scoping should be undertaken.			
Designated Project Corridors	A route that has been requested and constructed where electrical assets have been relocated to allow high loads to travel without breaching exclusion zones.			
Escort	A vehicle that displays warning signs and lights as required under schedule 8 Part 1 Division 5 of the Heavy Vehicle (Mass, Dimension and Loading) National Regulation and is driven by an accredited level 2 escort vehicle driver to warn other road users of the oversize vehicle's presence.			
High Load	A load exceeding 4.6 meters in height (measured from ground level) while being transported by a vehicle on a road.			
High Load Corridor	A route that has been identified for the regular transporting of loads greater than 4.6 metres, generally along major highways.			
High Load Escort Service Provider (electrical)	A person or company with applicable electrical work licences providing services to escort a vehicle in accordance with an electricity entity's electrical safety precautions. This person or company is responsible for the electrical safety regarding the height of the load.			
High Load Escort Service Provider (non- electrical)	A person or company providing services to escort a vehicle in accordance with an electricity entity's electrical safety precautions. This person or company is responsible for the electrical safety regarding the height of the load. The person does not hold an electrical work licence.			
Notification	Road transport operator's advice to the electricity entity of the intended route and specification of a high load.			
Pilot	A vehicle that displays warning signs and lights as required under schedule 8 Part 1 Division 5 of the Heavy Vehicle (Mass, Dimension and Loading) National Regulation and is driven by an accredited level 1 pilot vehicle driver, to warn other road users of the oversize vehicle's presence.			



Term	Definition		
Qualified person	A person who has successfully completed a high load transportation scoping course approved by Energy Queensland. The evaluation of the person's qualification will be made by Energy Queensland.		
Queensland Police Service (QPS) Escort	A QPS vehicle driven by a QPS officer to warn other road users of to oversize vehicle's presence.		
Road Transport Operator (RTO)	A person or company transporting a load more than 4.6 metres high.		
Scoping  Checking the suitability of, and the requirements necessary transport of a proposed high load by physically checking the route.			
Scoping service provider	An electricity entity, a person or a company who carries out scoping or assessing in accordance with an electricity entity's requirements.		

#### **ROLES AND RESPONSIBILITIES OF KEY STAKEHOLDERS**

Key stakeholder	Responsibilities for the transporting of high loads			
Electricity supply entity	Provide relevant electricity network information to transport operators and High Load Scoping / Escort Service Providers.			
	Advise precautions for scoping and escorting for high loads, which address the electricity risks of these activities.			
	Provide approval to travel in writing.			
	Notify Ergon Energy Network / Energex Network Management of any operational electrical safety problems that have been identified, for example damage to network assets.			
Scoping service provider or network	The scoping service provider's or network assessor's responsibility in relation to the transport of high loads is to:			
assessor	Provide accurate information about the network through which the high load is to be transported.			
	Information should be documented on the High Load Scope Record Form			
	Advise the RTO on what precautions and actions are to be carried out to ensure safe passage of the load.			
	Provide the RTO and Energex / Ergon Energy Network with a documented record of the route scope when required.			
	Notify Energex / Ergon Energy Network of any operational electrical safety problems that have been identified, for example damage to network assets.			
High Load Escort service provider	The High Load Escort Service Provider's responsibilities in relation to the transport of high loads include:			
(electrical and non- electrical)	Understand exclusion zone concepts and their application.			
electrical)	Ensure that only persons with appropriate training are engaged to perform relevant activities associated with escorting the high load.			



Key stakeholder	Responsibilities for the transporting of high loads				
noy stanonoladi	Inform Energex / Ergon Energy Network if load and route do not conform to the notification details.				
	Use only specialised equipment, especially where the equipment may and can come into contact with exposed live parts.				
	Notify Energex / Ergon Energy Network of operational electrical safety problems that have been identified, e.g. damage to network assets.				
	Direct road transport operators to ensure electrical safety is maintained.				
Pilot / Escort / Police	Warn other road users of presence of oversize vehicle/combination.				
	Assist with the safe movement of an oversize vehicle or combination on the road.				
	Confirm that the high load to be transported matches the details record on the Notification to Transport under Entity Assets form.				
Road Transport Operator	Road transport operators' responsibilities in relation to the transport of high loads include:				
	<ul> <li>Notify Energex / Ergon Energy Network of the intention to move a high load near network assets.</li> </ul>				
	Provide accurate information about high loads to Energex / Ergon Energy Network.				
	Comply with precautions required by Energex / Ergon Energy Network.				
	Comply with directions of High Load Escort Service Provider.				
	Where a High Load Escort Service Provider is not required, the RTO must contact Energex / Ergon Energy Network about operational matters affecting electrical safety. It is the road transport operators' key responsibility to not contact or breach the exclusion zones to the electrical network.				
	An example of an operational matter, which would affect electrical safety, would be if the high load transport encountered electric lines lower than the minimum clearance prescribed in the regulation. Refer section 207 and Schedule 4(1) and (3) of Electrical Safety Regulation.				

#### TRANSPORT OF HIGH LOADS: CONDITIONS

Notification to transport form must be submitted to Energex / Ergon Energy Network at <a href="https://highloads@energyq.com.au">highloads@energyq.com.au</a> for category 2, 3 and 4 loads with the completed High Load Scope Record for the route, as required. Notification for the transportation of a high load must contain the following:

- Dimensions of the load. The maximum travel height of the load should be determined by combining the height of the object and the vehicle used for transportation. If unable to predetermine the exact measurement, the maximum possible height shall be used for scoping or assessing purposes.
  - Include information regarding if the load can be lowered to negotiate crossings and specify this height.



- The preferred control measure is to reduce the height of the high load as far as practicable so as not to breach any exclusion zones of crossings along the travel route.
- The submission should include a profile of the load through the provision of a photo / sketch, etc. clearly defining the dimensions.
- Route specification.
  - Include if using opposite side of the road, travel opposite direction on one-way streets, etc
- Time or times during which transport is required to take place.
- Scoping, as per requirements stipulated in Authorised High Load Scope Fact Sheet -27346120.
- Escorting, as per requirements stipulated in Authorised High Load Escort Fact Sheet -3015089.
- Details of the service provider responsible for facilitating the transport of the high load and providing safety precautions.
- Energex / Ergon Energy Network will assess the proposed route with the Notification to Transport, review the High Load Scope Record as required and provide a written response a minimum three business days before the planned travel date, providing the Notification is submitted within the required timeframe. The Road Transport Operator must ensure compliance with any conditions stipulated in the returned permit.

Category no.	Maximum transport height of load above road	Transport requirements		
1	Up to 4.6 metres	Transport can be carried out with no notification.		
2	Over 4.6 metres, but not exceeding 5.0 metres	<ul> <li>Notification to Energex / Ergon Energy Network is required.</li> <li>The route should be scoped by a qualified person considering Energex / Ergon Energy Network's safety advice.</li> <li>The route shall be assessed by Energex / Ergon Energy Network referring to data that is available.</li> <li>It is the obligation of the Road Transport Operator to ensure a physical scope is performed if an assessment by Energex / Ergon Energy Network is unable to be completed for the entirety of the route.</li> <li>It is Energex / Ergon Energy Network's obligation to perform an assessment over the scope in provision of the permit to detail prescribed controls that must be put in place by the RTO.</li> <li>Generally, no escorting for electrical safety will be required. However, pending the outcome of scoping / assessment a High Load Escort will be required in instances where the</li> </ul>		
3	Over 5.0 metres, but not exceeding 5.5 metres	<ul> <li>high load will be in breach of exclusion zones.</li> <li>Notification to Energex / Ergon Energy Network is required.</li> </ul>		



Category no.	Maximum transport height of load above road	Transport requirements		
		<ul> <li>The route should be scoped by a qualified person considering Energex / Ergon Energy Network's safety advice.</li> </ul>		
		<ul> <li>The route shall be assessed by Energex / Ergon Energy Network referring to data that is available.</li> </ul>		
		<ul> <li>It is the obligation of the Road Transport Operator to ensure a physical scope is performed if an assessment by Energex / Ergon Energy Network is unable to be completed for the entirety of the route.</li> </ul>		
		<ul> <li>It is Energex / Ergon Energy Network's obligation to perform an assessment over the scope in provision of the permit with any additional prescribed controls that must be put in place.</li> </ul>		
		A High Load Escort will be required in instances where the high load will be in breach of exclusion zones.		
4	Exceeding 5.5	Notification to Energex / Ergon Energy Network is required.		
	metres	<ul> <li>The route shall be scoped by a qualified person considering Energex / Ergon Energy Network's safety advice.</li> </ul>		
		<ul> <li>It is the obligation of the Road Transport Operator to ensure a physical scope is performed by a qualified person considering Energex / Ergon Energy Network's safety advice.</li> </ul>		
		<ul> <li>It is Energex / Ergon Energy Network's obligation to perform an assessment over the scope in provision of the permit with any additional prescribed controls that must be put in place.</li> </ul>		
		A High Load Escort is required		
	High Load / Designated Project Corridors	Where there are negotiated and agreed High Load Corridors / Designated Project Corridors, Energex / Ergon Energy Network may negotiate conditions specific to that corridor.		
		<ul> <li>Designated Project Corridor agreements are at the discretion of Energex / Ergon Energy Network.</li> </ul>		

#### TYPES OF PERMITS AND APPROVALS

The Road Transport Operator or representative is responsible for submitting the Notification to Transport High Loads under Entity Assets form to <a href="mailto:highloads@energyq.com.au">highloads@energyq.com.au</a> within the timeframes below.

- 1. The notification must be submitted a minimum 10 business days before the movement date.
- 2. Loads requiring Energex / Ergon Energy Network to Scope or Escort for electrical safety require a minimum of 20 business days' notice, however, date of move is to be mutually agreed and dependent on Energex / Ergon Energy Network availability. (Approx. 28 days)



3. Notifications submitted with complete High Load Scope Records for the complete route will be expediated.

**Note:** Date form submitted, or date of move is not counted in business days. This notification does not exempt the Applicant from obtaining approval from Queensland Transport, NHVR, Queensland Police Applications, Powerlink Queensland, Telstra, NBN, Railway or other relevant Authorities.

The information on the Notification to Transport form is to be accurate advising the maximum travel height and if the load can be lowered, if required, to maintain exclusion zones in specific locations.

The relevant notification form is available to be downloaded on the Ergon Energy Network and Energex websites.

The Notification to Transport High Loads under Entity Assets form is a "one time use only" form. Unless it is transporting for specific circumstances, (12 month, Agricultural or Specific Projects on Designated Project Corridors) the Notification to Transport form will only be for one load (including convoys as noted on the Notification) during the 28-day period.

#### 12-month (Category 2 loads not exceeding 4.9m) permit application

- Permits to Transport Category 2 Loads (loads not exceeding 4.9m) for a 12 month period can be requested by submitting the Notification to Transport High Loads Form complying with the below requirements.
- 4.9m Period Notifications are ONLY valid for Major Roads & Corridors.
- Loads travelling on residential, suburban or local streets and roads will NOT be covered by this approval.
  - The Transport Operator will need to submit an individual Notification to Transport form for any load OVER 4.6m that intends to travel on these types of roads.

#### Agricultural seasonal permit

- Permits to Transport Category 2 Loads (i.e. Cane Harvest Equipment) of 4.6m to 5m can be requested for the six-month cane crushing season of May to December only. The Notification to Transport High Loads Form will need to be submitted for harvesting equipment being moved in the off-season. (If crushing season extends, letter to be provided from Canegrowers / Australian Cane Farmers Association to confirm dates).
- High Loads that exceed a travel height of 5.0m and less than 5.3m are valid for 1 month and applicants will be required to submit a new application every month during the Crushing Season.

#### PERMIT APPROVAL.

Energex / Ergon Energy Network will review all notifications for the movement of high loads and issue a written response to the applicant a minimum three business days before the planned travel date, providing the Notification is submitted within the required timeframe.

#### **SCOPING**

Category 2 and 3 High Loads - The Road Transport Operator notifying of the transportation of high loads shall ensure that any part of the proposed route not assessed by Energex / Ergon Energy Network, has been physically scoped within 28 days of the start of the travel by an Authorised Scoping Service Provider and details provided to Energex / Ergon Energy Network.

Category 4 High Loads - The Road Transport Operator notifying of the transportation of high loads through the Ergon Energy Network / Energex areas must ensure that the proposed route has been physically scoped within 28 days of the start of the travel by a Scoping Service Provider.



The responsibility of an Authorised Scoping Service Provider is to supply **accurate information** to the transporter about the network through which the high load is to be transported. This information is critical to enable the safe transportation of the load.

Energex / Ergon Energy Network are to investigate reports of conductors below statutory height and prioritise accordingly. If the defect is unable to be rectified in a timely manner, the Road Transport Operator is to be advised, if required, to be able to implement other control measures. This could be the identification of another suitable route.

# AUTHORISED HIGH LOAD SCOPE AND ESCORT APPROVAL REQUIREMENTS

To become an Authorised High Load Scope and / or Escort Service Provider, the applicant must first satisfy the "person in control" of the electrical part, in this case Energex and Ergon Energy Network, that they possess the necessary competencies to undertake the tasks involved. This may involve attending face to face training conducted by Energex / Ergon Energy Network.

The employer/self-employed person must satisfy Energex and Ergon Energy Network that they possess the necessary competencies to undertake the tasks involved and these skills shall be maintained while they remain an Authorised High Load Scoping / Escorting Service Provider.

The employer/self-employed person must seek written Energex and Ergon Energy Network approval for each, and every person involved in the scoping and / or escorting for high load transportation under its assets i.e. power lines.

Every individual employed by the Authorised High Load Scoping / Escorting Service
Provider that is involved in the scoping / escorting for high loads under Energex and Ergon
Energy Network assets must be able to recognise communication cables, Low Voltage, and
High Voltage conductors, including ways of ascertaining the voltages present and the
relevant exclusion zones that must be maintained.

An Authorised High Load Escort Service Provider (electrical) is required to have permission from Energex / Ergon Energy Network to raise Low Voltage Conductors, to allow the high load to pass without breaching exclusion zones.

- The preferred control measure is to reduce the height of the high load as far as practicable so as not to breach any exclusion zones of conductors along the travel route.
- Consideration shall be given to de-energisation of the overhead conductors to reduce the exclusion zone and eliminate the electrical hazard.

If High Voltage Conductors are to be raised or lowered, the Road Transport Operator will be responsible for requesting switching for this through the relevant website.

Customer requested switching form | Ergon Energy

Customer requested switching form | Energex

A minimum 20 business days are required to schedule this activity.

#### PERMANENT RAISING CONDUCTOR REQUIREMENTS

Energex / Ergon Energy Network are to identify locations where conductors are being lifted multiple times and assess the need to raise permanently. The Road Transport Operator(s) may be responsible for some, or all these costs as agreed with Energex / Ergon Energy Network.

Energex / Ergon Energy Network are to assess the benefit of permanently raising conductors where it has been identified that a high load will breach the exclusion zone, and the lifting of a Low Voltage conductor will be required for the high load to travel. The Road Transport Operator(s) may be responsible for some, or all these costs as agreed with Energex / Ergon Energy Network.



The Road Transport Operator is responsible for arranging the raising or relocating of other entity's assets to allow the high load to travel.

#### ROAD TRANSPORT OPERATOR

The Road Transport Operator has the overarching responsibility of transporting the load and is required to comply with the directions of the Police, Pilot, High Load Escort, and Energex / Ergon Energy Network.

When arranging the transporting of the high load, the Road Transport Operator shall determine the lowest practicable height that the load can be reduced to.

The Road Transport Operator is to have a Safe System of Work in place that supports the safe transportation of the High Load so as not to breach any exclusion zone to Entity powerlines or assets along the travel route.

The scoping of the proposed route to travel will be performed by the Scoping Service Provider and provided to the Road Transport Operator, and High Load Escort Service Provider, if required. The Road Transport Operator has the responsibility to not contact any network assets or breach exclusion zones even if the assessment and / or the Scoping and / or High Load Escort Service Providers indicate that the route is clear.

#### EMERGENCY REQUIREMENTS AND INCIDENT MANAGEMENT

#### **Emergency requirements**

At all times, Road Transport Operators are to work in accordance with their Safe System of Work. Energex / Ergon Energy Network are not liable for any incidents that occur during the transportation of high loads.

If inadvertent contact is made with the Energex / Ergon Energy Network, including unintended contact made by a vehicle mounted height stick, the high load is required to be positioned in the nearest safe location.

Operators inside the vehicle that has made contact, **must remain inside** the vehicle, and immediately contact the following emergency Energex / Ergon Energy Network numbers:

Ergon Energy: 13 16 70

Energex: 13 19 62

If required, Operators to contact 000.

Where applicable, Pilot or High Load Escort vehicles are to set up an exclusion zone around the impacted vehicle or wires on the ground in accordance with their safe system of work.

As soon as practicable after the contact with the network is made, the Energex / Ergon Energy Network High Loads Team, <a href="mailto:highloads@energyq.com.au">highloads@energyq.com.au</a> must be advised of the incident details, including the reference number from the relevant contact centre.

#### **Incident management**

The Road Transport Operator is required to have an incident management process in their safe system of work. This must include communication to relevant parties regarding details of incident, such as shocks, tingles and contact with electricity network.

Damage to the Energex / Ergon Energy Network at the fault of the Road Transport Operator may be at the cost of the Road Transport Operator and a copy of the investigation report conducted by the Road Transport Operator is to be provided to Energex / Ergon Energy Network as requested.

Action to be taken against the party at fault could be the removing of Authorisation, if applicable, extra assurance activities, or additional control measures for future travel.



#### **Energex / Ergon Energy Network assurance**

In relation to the transportation of high loads, Energex / Ergon Energy Network will conduct verification and compliance assurance activities.

Assurance activities are designed to confirm high loads are being transported in accordance with the roles and responsibilities of all stakeholders involved, including:

- accurate information of network being travelled through is available.
- adherence to advised dimensions.
- adherence to advised transportation route.
- only authorised activities are occurring, and only authorised persons are conducting those activities.
- in the event of authorised activities occurring, activities are conducted in adherence to the service provider's safe system of work.
- adherence to any additional provisions required per Energex / Ergon Energy Network's conditions.

Energex / Ergon Energy Network reserves its rights to perform unannounced verification activities at its discretion.

#### DESIGNATED PROJECT CORRIDOR REQUIREMENTS

#### Requesting construction of designated project corridors

For requests for augmentation work (construction of a corridor), the customer is to contact the Energex / Ergon Energy Network High Loads team - highloads@energyg.com.au

The customer will be required to supply:

- Customer details. (Entity name for invoice and contract, phone, email, ABN/ACN, Postal Address)
- Maximum laden height, dimensions (and profile) of loads.
- Expected start and end dates of transporting, frequency, and quantity for each load.
- Start and end locations.
- kmz file of the route indicate if approved by TMR.
- Completed conflict register.
  - Full scope of the proposed route from an Authorised Scoping Service Provider.
  - o Information of locations that require relocation of assets, including 'swept' paths.
- 'Swept" path information to be provided for all relevant intersections along route, even if no current assets are within the identified 'swept' path.
- The length of the load is to be considered regarding contours of the road / travel path to ensure that no part of the load will encroach on the exclusion zones to any crossing.
- Photos of assets at locations that require relocation are to be provided and referenced in the conflict register, include map/aerial shots.



Alternatively, applications can be lodged online by any member of the public here, including the information above:

- <a href="https://epp.ergon.com.au/epp/public/selfservice">https://epp.ergon.com.au/epp/public/selfservice</a> using the 'enquire now' button in the 'Connection Application' section.
- If the portal has not been used before, registration of details will be required before being granted access. Once access is given, 'submit' a 'Detailed Enquiry' and then 'Asset Relocation' before completing the form details and attaching documents.
- When the form is completed and entered in the portal a reference number will be provided and progress can be tracked.

Once the application is lodged a reference number will be provided and progress can be tracked. The Customer team will review the information and then be in contact to discuss an application fee and begin the negotiations required to make an offer to undertake the work.

Upon completion of the augmentation work, notification will be supplied to the customer.

It is a requirement of Energex / Ergon Energy Network that a person carrying out activities in accordance with a High Load Escort Service Provider has been authorised by Energex / Ergon Energy Network.

A Non-Electrical High Load Escort does not require an electrical licence if escorting for an approved "Specific High Load Project" along an approved Designated Project Corridor.

An approved "Specific High Load Project" is a project where High Loads with the same dimensions are being moved along the same approved and designated route multiple times a week for an extended period. Approval of a "Specific High Load Project" is to be sought through <a href="https://disabs/nighloads@energyq.com.au">highloads@energyq.com.au</a>

Approved Designated Project Corridors are agreed routes that have been constructed for the transportation of High Loads for Specific High Load Projects.

During escorting activities for electrical safety on a Designated Project Corridor, the High Load Escort Service Provider must be able to demonstrate the detailed requirements listed in **Designated Project Corridors.** 

Approval to travel under other entity assets, Powerlink, QRail, etc, is to be sought from that entity.



#### What is an unsafe distance for an overhead electric line?

**Electrical Safety Regulation s69** A person comes within an unsafe distance of an overhead electric line if the person is within the exclusion zone for the person for the line.

Any operating plant, or a vehicle, comes within an unsafe distance of an overhead electric line if the operating plant or vehicle is within the exclusion zone for the operating plant or vehicle for the line.

A **vehicle** includes anything the vehicle is carrying or otherwise handling.

#### What is an exclusion zone?

**ES Regulation s69** An exclusion zone, for a person, operating plant, or vehicle for an overhead electric line, means the distance from the line stated for the person, plant or vehicle in Schedule 2 of the ES Regulation.

The exclusion zone distances from Schedule 2 of the ES Regulation are replicated in Appendix B of the Electrical Safety Code of Practice 2020 - Working near overhead and underground electric lines.

An exclusion zone is a safety envelope around an overhead electric line. No part of a worker, operating plant or vehicle should enter an exclusion zone while the overhead electric line is energised (live).

Exclusion zones keep people, operating plant, and vehicles a safe distance from energised overhead lines.

#### Which exclusion zone applies?

Different exclusion zones apply depending on the level of competence, training, and skills of the worker and whether the worker has been authorised by the owner or person in control of the electric line to work within a closer distance. In some cases, the applicable exclusion zone will also depend on whether a safety observer or "spotter" is utilised.

#### **Untrained person**

An untrained person, for an electric line, means a person who is not an authorised person or an instructed person for the electric line. The greatest exclusion zone distances apply to untrained persons.

#### **Authorised person**

An authorised person, for an electric line, means a person who:

- a) has enough technical knowledge and experience to do work that involves contact with, or being near to, the electric line
- b) has been approved by the person in control of the electric line to do work that involves contact with, or being near to, the electric line, or is authorised to act for the person in control of the electric line.

To authorise a worker, the person conducting the business or undertaking must first gain approval from the person in control of the electric line to do the work that involves being near to the electric line. The person conducting the business or undertaking would need to ensure that the worker has enough technical skill and knowledge to carry out the work.

In many instances, approval would need to be sought from an electricity entity. Once the approval is gained from the person in control, the person conducting the business or undertaking would need to authorise the worker to carry out the work.



# EXCLUSION ZONES FOR UNAUTHORISED (UNTRAINED) AND AUTHORISED (TRAINED) PERSONS

Nominal phase to phase voltage of overhead electric line	Uninsulated		Insulated	
	Vehicle operated by untrained person for the electric line (mm)	Vehicle operated by authorised person or instructed person for the electric line (mm)	Vehicle operated by untrained person for the electric line (mm)	Vehicle operated by authorised person or instructed person for the electric line (mm)
Communications cables, stay wires	100	100	100	100
Low voltage	600	600	600	600
above low voltage, up to 33kV	900	700	900	700
above 33kV up to 50kV	2100	750	2100	750
above 50kV up to 66kV	2100	1000	2100	1000
above 66kV up to 110kV	2100	1000		
above 110kV up to 132kV	2100	1200		
above 132kV up to 220kV	2900	1800		
above 220kV up to 275kV	2900	2300		
above 275kV up to 330kV	3400	3000		
above 330kV up to 400kV	4400	3300		
above 400kV up to 500kV	4400	3900		

To help plan to work safely near above ground electricity, use the look up and live map, <u>Look up and live - BYDA</u> provides an interactive map to identify the powerlines and their voltages. Look up and Live is a planning tool that can help to understand exclusion zones and provide the pole numbers, and voltages when planning routes for transporting.

Information on training to scope / escort for high load transportation can be found here:

Esitrain - M225 Scope a High Load Transport Route

Information on training to become an Authorised Person can be found here:

 $\underline{https://www.esitrain.com.au/courses/face-to-face/introduction-to-electrical-network-infrastructure-for-authorised-persons}$ 

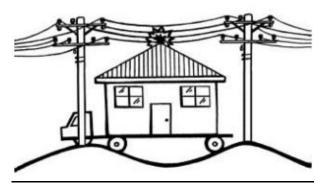
Information to apply to become an Authorised Person, after the completion of training can be found here:

https://www.energex.com.au/contractors/electrical-contractors/authorised-person https://www.ergon.com.au/network/contractors/electrical-contractors/authorised-person

Further information can be found in the <u>Electrical safety code of practice 2020 - Working near</u> overhead and underground electric lines



Proposed travel routes need to have consideration of the road profile and where the vehicle is to travel along (Figure 1). Allowances should be made for changes in the road profile e.g. dips and the distance between front and rear wheel axles as per Part 8 "Transportation of High Loads Near Electric Lines" of Electrical Safety Code of Practice 2020 Working Near Exposed Live Parts



(Figure 1): Illustration on how a dip in the road profile can affect the clearance height of over dimension loads

NHVR have specific requirements separate to the Electrical Entities, a NHVR permit approval does not negate the need for the Notification to Transport High Load (greater than 4.6m) under Entity Assets - <a href="https://www.nhvr.gov.au/road-access/access-management/third-party-approvals">https://www.nhvr.gov.au/road-access/access-management/third-party-approvals</a>