



**COMMUNITY CONSULTATION
NORTHERN NSW**

A SOCIAL RESEARCH
REPORT

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1. BACKGROUND TO THE RESEARCH

TNS Social Research, an independent research organisation was commissioned by TransGrid to undertake community consultation in northern New South Wales.

The key purpose of this consultation is to:

“identify and explore the general sentiment and concerns of landowners within the identified catchment areas of Tenterfield and Drake towards the new transmission lines being built / upgraded within these areas”.

Given the exploratory nature of this requirement a qualitative approach was used whereby community members were recruited to attend a series of focus group discussions held within the townships of Drake and Tenterfield.

Each of these focus group discussions were of two hours in duration and conducted between Tuesday 1st and Thursday 3rd September 2009.

In total the research comprised 38 respondents, representing 27 properties with recruitment structured to include the primary decision maker(s) for each property. Of the 27 properties represented,

- seven properties were situated along the proposed upgraded transmission line route between Tenterfield and Drake, and
- 20 properties along the proposed new transmission line route between Tenterfield and Mole River.

This report details the findings of this community consultation.

2. GENERAL ATTITUDES TOWARDS POWERLINES

2.1 Where should powerlines be located?

With regard to the placement of above ground powerlines there is a distinct preference that powerlines be situated so as to minimise impact upon land usage and residents within the area.

The following section details community attitudes, concerns and preferences towards powerline placement against key factors identified by TransGrid as being potential considerations or constraints of actual power line route determination.

Proximity to buildings

Community preference is that routing of powerlines be undertaken in such a way that any such proximity to buildings, (especially residential buildings), is avoided as a matter of priority.

Health concerns

There are significant concerns among the community as to the health impact that may result as a consequence of proximity to power lines. More specifically there is concern that residential proximity to powerlines will result in to long term exposure to electro magnetic fields and radiation.

Landholder activities

There is a concern that the presence of power lines on a property may restrict landowner's freedom to undertake activities upon certain parts of their property.

To this end there is a strong viewpoint that the placement of power lines should be undertaken in a way that ensures that no residence is located within close proximity to powerlines and that the placements of powerlines should also take into consideration common land usage activities upon that property, such as driveways, children's playing areas and picnic spots.

Property size

In regard to privately owned landholdings there was a distinct preference that powerlines be routed so as to run across larger properties as opposed to smaller landholdings. The reasons for this preference were two fold:

First, it was felt that on larger landholdings routing could occur so that maximum distance to any residential structures situated upon such holdings was able to be achieved.

Second, it was felt that the overall impact of a power line upon a larger land holding would be less in relative terms due to a larger proportion of that land holding being unaffected. More specifically it was felt that on a larger property the overall impact on potential land usage of the property (and hence impact upon land value) would be

contained to only one part of the property, as opposed to impacting upon the property in its entirety.

Land capability

Community members tended to refer to 'land capability' as being 'land usage', with all community members felt that the presence of powerlines on their properties had the potential to impact upon the types of land usage their property was used for now as well as its suitability for certain types of land use in the future.

In relation to agricultural activity there was concern as to the impact that the general proximity of high voltage power lines to a property would have on breeding programs and stud activities being undertaken upon a property.

With regard to the land usage concerns of those land holders engaged in cropping and grazing activities, these concerns were largely driven by the potential impact that the *actual* placement of the power lines may have upon land usage as opposed to being driven by the presence of powerlines per se. More specifically there was a view that powerlines and associated structures would need to be placed carefully across paddocks so that the ability to sow and harvest was not affected.

As such there was a strong preference for power lines to either avoid such properties (by following boundary roads), or alternatively where crossing a land holding was necessary that the powerline should follow existing fence lines so as to minimise disruption to the paddock.

There was also concerns raised about access being provided to the easements associated with powerlines, both during construction and ongoing, with such access seen to be potentially detrimental to crops sown in close proximity to the access tracks and/or creating disruption to stock grazing. There is a strong preference for the placement of powerlines upon properties engaged in such land usage to be situated along fence lines so as to minimise these potential impacts.

In a related vein those involved in cropping activities were also concerned as to the issue of weed control and the potential transfer of weeds from one property to another occurring as a result of access being required both during construction and beyond.

In particular the presence of powerlines was felt to impact negatively upon the future ability of the landholder to be able to build additional residential structures upon their property or upon the ability of property holders to sub-divide their properties.

However it was unclear as to whether the presence of powerlines upon a property would negate the ability of the land holder to engage in organic farming practices.

Airfields and landing strips

Closely related to the issue of land capability or land usage was the issue of airfields and landing strips. Concern was raised in relation to this issue that while it was considered a given that immediate proximity to such land usage would be avoided, it

was also necessary that the placement of power lines also took into account the broader take off and landing paths of aircrafts.

Mention was also made that there are potentially private air strips within the area that are not currently detailed upon the maps being used for the determination of the route. And while actual usage of these air strips may be infrequent it was none the less felt that their presence should still be an important factor into routing determination as they represented a pre-existing type of land usage whose sustainability may be negatively impacted.

Visual impact

As detailed within the previous section powerlines were generally considered to be unattractive structures. As such it was felt by community members that the location of powerlines should be undertaken in a way that minimised the visual intrusion that the presence of powerlines had upon the landscape.

Consideration of this issue centred on the preference for powerlines to be situated away from residential dwellings so that the vistas enjoyed by the occupants of such dwellings were not negatively impacted. In addition, there was also a concern that the presence of power lines within the broader landscape would be of detriment to the community as it would undermine the overall scenic nature of the area.

It was felt that such impact could be reduced by locating power lines in those areas that were less visible, with mention being made that this should include use of state forests and/ or crown land situated away from more populated and traversed areas.

Mention was also made that visual impact could be reduced by running powerlines through gullies as opposed to between higher vantage points.

Use of public land

There was a strong perception among the community that where ever possible power lines should be situated on public as opposed to privately held land. This was largely driven by the desire for routing to be undertaken in such a way that the impact upon farming practices be minimised as well as reducing the need for proximity to residential dwellings.

This preference for the usage of public land encompasses both the clearways along roads (in order to reduce the intrusion of powerlines upon farming land) as well as more generalised routing of powerlines through state forests and national parks so as to minimise routing through privately held land.

Alternative routes in national parks or state forests were also seen to be preferable because it was believed uncleared areas were largely unpopulated.

It was acknowledged that there are potentially some legislative restrictions that may impact upon routing being done through state forests and national parks. No mention was made as to a perceived negative environmental impact that would result from such construction.

Issues of potential fire risk if construction occurs through such public lands were also dismissed on the basis that easements would actually serve to create fire breaks, while the access roads necessary for the construction of powerlines would be of benefit to fire control should unrelated bush fires occur.

Heritage areas

There was no specific mention of the need for routing determination to be influenced by any consideration as to the avoidance or protection of heritage sites, although the implied concerns received through other comments (such as claims Tenterfield is the 'Birthplace of Australia') would indicate protection of heritage sites as a priority for route selection.

Vegetation and terrain considerations

There is a consensus among the community that building upon cleared and/or flat land would be a preferable approach for TransGrid in terms of ease of construction. However, the community perception is that vegetation and terrain considerations should be considered as secondary to current land usage, proximity to dwellings and visual amenity.

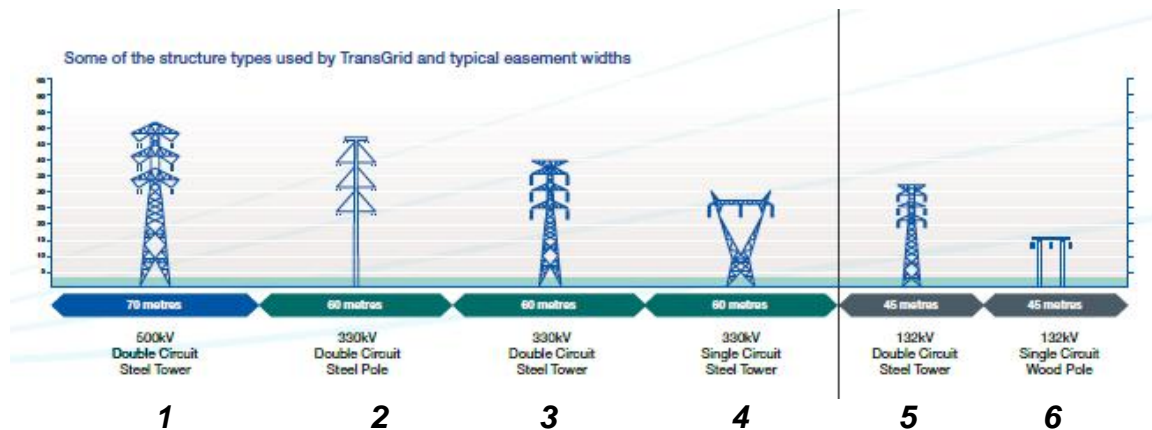
Impact upon flora and fauna

Discussion as to the impact of powerline routing on flora and fauna was limited to concern as to domestic or agricultural activity with no mention being made as to the potential impact that may be felt upon native or protected fauna and flora within the areas. That the community does not actively consider the preservation or protection of such flora and fauna as being a key input for consideration in regards to the determination of power line route is also evident in the widespread support for the placement of powerlines to be situated through state and national parks and forests.

2.2 What should powerlines look like?

The overwhelming desire among the community is that large scale transmission lines are built in as unobtrusive way as possible. For most residents this translated into a desire for the structures to be as contained as possible in terms of width.

In regard to height however there was some debate as to whether these should be taller or shorter, with differing arguments put forward in relation to such factors as impact upon overhead aerial access, interruption to land use and visual preference.



With reference to the above diagram showing potential types of power line structures, structure type 4 was the least preferred, with structures 5 and 6 typically the most preferred overall. Among the larger voltage lines structure type 2 was the most preferred.

A preference was also stated for concrete structures to be used as opposed to steel, largely driven by aesthetic considerations, particularly in regard to the concrete being able to be coloured so as to blend with the environment. Discussion was had however in relation to the feasibility of this option being used if the power line route bends.

2.3 What are the practical considerations that need to be taken into account when routes for new power lines are decided?

By acknowledging the benefits that can be accrued through the construction of powerlines across farming land there is a tacit recognition of the potential practical constraints that relate to the building of powerlines across uncleared land or in state forests, (such as less direct routing, clearance and access issues).

However targeted discussion around such potential constraints revealed a sentiment that these issues are less of a concern than the perceived impact that alternative routing across farmed land may have.

Issues of potential fire risk if construction occurs through state forest/national parks were also refuted on the basis that the community believed easements would actually serve to create fire breaks and access roads necessary for the construction or powerlines would be of benefit to fire control should unrelated bush fires occur.

Such alternative routes were also seen to be preferable in that as such uncleared areas were largely unpopulated thus has less of a perceived impact.

There was not an apparent appreciation that efficient cost of construction benefited the broader community through electricity pricing and otherwise.

2.4 What is the alternative to having powerlines?

A strong sentiment was found to exist within the community that where possible powerlines should be placed underground as opposed to overland, particularly when powerlines are located within populated areas including small land holdings.

The argument for underground placement of power lines was based upon visual preference and perceived lower impact upon land usage, despite the fact land usage is much less for land above underground cables, as opposed to overhead lines. There was seemingly little consideration within the community as to any associated issues that may arise such as increased cost of construction, or of any impact upon land usage during construction or maintenance issues. This observation emphasises that the primary concern for the community is related to resultant end impact upon their land and life style as opposed to what may be constraints or considerations related to construction. Knowledge that electromagnetic radiation of underground cables (as opposed to overhead lines) is much greater was not apparent.

The concept of the potential cost of construction that would be associated through alternative placement of powerlines resulting in a potential flow on effect to personal electricity bill costs was also explored. However there was a seeming lack of understanding or acceptance that such alternatives would have a cost implication for their electricity bills.

There is also a strong sentiment among the community that further investment in power line infrastructure is both unnecessary and short sighted. This argument is based on the perception that coal electricity an '*antiquated*' energy supply and that focus should instead be placed on developing alternative energy sources.

More specifically community members felt that the increase of alternative power sources within the home such as solar heating (backed by government initiatives and cash backs for installation), and the development of alternative power sources such as hydro and water electricity, would lead in time to coal based electricity being obsolete and as such the need for powerlines redundant.

Such arguments were primarily based on the idea of individual community or household self sustainability, as opposed to recognition of an ongoing need for transmission of electricity supply from source to usage point both now and in the future, regardless of source.

3. WHAT VALUE IS PLACED UPON CONTINUITY AND/ OR RELIABILITY OF SUPPLY

Rational assessment as to the value that is placed upon the continuity or reliability of electricity supply is difficult for an individual to express given that it is considered a basic service which is already enjoyed and largely taken for granted.

As such an assessment as to the value placed upon such continuity or reliability of supply can be inferred only through reference to, and assessment of, other emergent areas of discussion.

Such assessment indicates that the actual value placed upon continued or reliable supply of electricity is extremely high. This is evident in that all landholders are users of electricity and their homes are all connected to an electricity supply. Furthermore in instances where connection to the main grid was not feasible (based on cost of connection) alternative arrangements were made to ensure that a regular supply of electricity is still able to be enjoyed.

The concerns of the community in relation to infrastructure developments (aimed to ensure continuity and reliability of supply for all) were found to primarily relate to the impact that the presence of powerlines will have upon them as individuals. It is apparent from the direction and focus of the resultant discussion around this topic that the priority in managing such a perceived impact is upon finding a viable and or workable solution which will ensure continuity and reliability of supply for all.

More specifically the overall high value that the community has upon continuity and reliability of supply can be inferred from the observation that despite the extremely high levels of opposition to the proposed routing of the powerlines there was never a suggestion that the perceived end users of the increased supply (i.e. the far north coast) should be left without electricity. Instead the community was highly engaged in deliberation as to where alternative sources of electricity could be secured from, or where alternative routing of powerlines could occur in order to ensure the delivery of required supply.

4. GENERAL UNDERSTANDING AND CURRENT KNOWLEDGE LEVELS RE. NEW POWERLINES

4.1 What is your current understanding of the proposed new power line constructions scheduled for you area?

Consultation with community members was targeted to include those whose properties are located in the vicinity of the proposed new line as well as those along the proposed upgrade. As such there was a strong understanding as to the general route or study area that this construction will take place along. However there was no specific knowledge held as to the exact line of the route and more specifically placement of poles along this route. This is consistent with information supplied by TransGrid officers in the area to the effect that no route has yet been decided upon.

With regard to the understanding of the easement associated with the power lines there was a general understanding as to the size of and requirement for the easement, however specific knowledge as to exact dimensions and restrictions upon land usage within that easement was variable.

4.2 What the purpose of the new power line is for – i.e. why is it being built?

There is a strong perception among the community that the new lines and upgrades to existing powerlines within their area is being undertaken in order to ensure continuity of electricity supply to the north coast of NSW. There was a further widespread perception that the requirement for such supply upgrade for the north coast is primarily a future need which based upon population projections will not actually be required until 2031, despite public information stating a requirement by 2012.

While the right of north coast residents to be able to access a reliable supply of electricity was not acknowledged, considerable debate was had as to whether the proposed infrastructure upgrades currently being planned within the Tenterfield area are the most suitable means of delivering to this need.

The focus and direction of discussion in relation to this debate were largely underpinned by three key issues. As indicated above the first of these issues was the perception that the actual need for increased supply will manifest itself until 2031. To this end community members questioned both if such increase in supply was not a current need why did the proposed infrastructure upgrades need to occur now.

The perception that upgrades were being undertaken to service future need also resulted in community members questioning the validity of such projections. This questioning was based upon their beliefs in relation to the long term viability of coal electricity and the related impact that a rise in the prevalence of alternative electricity sources would have upon coal generated electricity demand (and as such upon the actual need for related infrastructure development).

These perceptions are based largely on word of mouth information being circulated throughout the community with reference being made to an Environmental Defenders Office submission which it is perceived refuted the need for the upgrade. It should be noted however that although reference to this submission was widely cited there was little specific knowledge of actual content of this submission.

The second key issue undermining perceived need for infrastructure upgrades to occur was driven by a seeming perception among the community that supply of electricity is essentially a localised issue. More specifically the community seemingly believes that as they already have a reliable supply of electricity such a supply for their area will be able to be delivered to in the future without any local infrastructure upgrades being required.

This assumption highlights that there is a lack of understanding within the community as to the integrated approach that underpins continuity of power supply across the entire grid and thus a lack of understanding as to how increased demand in one area of the state will impact upon the broader availability and reliability of supply for all, including within their community. There is thus a strong sense among the community

that while they will be impacted by the infrastructure upgrades will not receive any actual benefit from it.

The lack of understanding as to how the supply of electricity is managed at a national grid rather than at a localised level also indicates a basic lack of appreciation among the community as to where the power supply that they currently enjoy is generated and/ or how such supply is delivered to them.

While there was mention made by one community member that the construction of new powerlines is a sign of progress and therefore necessary, this viewpoint was in the minority with a lack of appreciation that such development equates to ongoing assurance of continuity of supply for all and that without investment in transmission lines the continuity and/ or reliability of supply that the community enjoys may be threatened within the future.

4.3 Why their area is under consideration – are there alternative routes they would prefer?

Regardless of the perception and beliefs as to validity of need, there is a strong sentiment within the community that, as the infrastructure upgrades are being driven by the needs of the far north coast of NSW, such needs are better supplied from QLD or through establishment of electricity plant on North Coast area, thus reducing need for transmission.

There is no seeming knowledge or awareness among the community as to why the power line routes need to pass through the Tenterfield and Drake areas, or how this routing relates to overall state wide supply of electricity for all.

This observation again highlights that there is a perceived lack of benefit to the local community from the proposed upgrades as it relates to assurance of local continuity of supply.

Throughout the consultation mention was made that alternative viable routes exist within the area such as utilising state forest land and/ or by shifting the route to straddle larger property holdings.

4.4 What understanding is there of compensation.

While there is a widely held understanding that compensation is only paid to a land holder if a powerline is physically located upon their property, detailed knowledge as to the level of compensation that the individual land holder will receive is extremely limited with no specific mention of actual value or explicit means of how such compensation will be calculated being made. Instead there is a high level of uncertainty and lack of clarity as to whether compensation will be calculated as a set amount by the NSW Valuer General or though negotiated value based upon consultation and independent assessment carried out on an individual property by property basis.

Similarly there is also a seeming lack of clarity as to whether compensation is paid as a lump sum or as a lump sum plus annual payments to compensate for ongoing access and easement restrictions.

Regardless of how compensation is calculated or paid there is a distinct viewpoint that the amount will be insufficient to compensate for the potential impacts. The belief is seemingly driven by an assumption that compensation will be based on current land value alone with such a measure not being a true reflection of the broader impact the power line will have on the property.

5. IDENTIFICATION OF KEY INFORMATIONAL REQUIREMENTS TO ADDRESS CONCERNS

5.1 Identification of key informational requirements to address concerns in relation to the proposed route of the upgrade to the existing power line

There is a need for general communication about why such infrastructure development is required and how this relates to the assurance of continuity of supply.

Communication is also needed to address concerns landholders have as to what is driving the timeframe for this project.

More specifically however information is sought as to why the proposed route needs to pass through or near their properties, given the perception that alternative and viable routes exist. To this end landholders require detailed information as to:

- What consideration has been made of alternative routes?
- Why are such alternatives not considered to be viable? With a need for specific detail as to the nature of the actual physical / environmental / cost constraints that cannot be overcome and the reasons as to why not.

The community consultation with landholders along the proposed study area between Tenterfield and Lismore found that such landholders had comparatively limited concern as to why the upgrade was required or why their particular property was to be impacted. That an existing power line was already in place seems to have resulted in a reluctant acceptance of “*the need for progress*”.

However landholders share many of the same key information needs as they relate to the actual impact that the proposed infrastructure developments will have upon their specific properties, with these information requirements detailed within the following section.

5.2 Identification of key informational requirements to address concerns in relation to the specific impact of the infrastructure upgrade upon individual properties

The informational needs that landholders have moving forward are largely related to the issues and concerns that they have in relation to understanding what impact the infrastructure upgrades will have upon their properties.

For those landholders situated along the proposed routes the first key concern and informational requirement is 'when'. There is a sense that there is a lack of clarity held as to the timing of the next phase of the project. This is also felt to apply to a lack of clarity as to when specific information as to the exact route and placement of powerlines will be available.

Hence landholders are seeking specific information as to when they can expect for the next phase to happen – or alternatively when they can expect detailed timings as to the next stage to be released.

Other key concerns that landholders have, and the related informational need are detailed below.

→ *Actual placement of towers and the appearance of these towers*

- Without knowing exactly what is being built and where landholders feel that they cannot actively manage future land usage and assess impact upon their property.

→ *What compensation will be paid*

- What is the dollar value?
- How will compensation be calculated?
- What right of negotiation will the individual landholder have as to final compensation amount?
- Will compensation incorporate consideration of lifestyle and land usage impact – or be based solely on current land value?
- Why is no compensation paid to those who are affected through proximity but not actual placement on holding?
- When will compensation be paid?
- Will compensation consist of a one off fee or is there ongoing payment?

→ *Health risks*

- Conflicting information exists as to what the risks are for health – particularly for those with existing medical conditions.
- Hair dryer and microwave comparisons mentioned but felt that this was inconsistent with other information in the public domain in relation to long term health risks.

- Impact on stocks capacity to breed also classified as a concern.
- More specific information as to health affects is thus needed.
- *Access to property / easement during construction and beyond*
 - What frequency and duration of access will be required?
 - How will access that cuts through cropping areas etc be managed and compensated for?
 - How will weed control be managed?
 - What responsibility will TransGrid have to landholders in regard to notification re access?
 - What will the actual size of the easement be?
 - What activities will be restricted within the easement area?