

# Appendix B-3 Constraints Identification Report, 2009



# Report

Dumaresq - Lismore 330kV Transmission Line Constraints Identification and Preferred Corridor Report

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## **Appendices**

#### Appendix A

Connell Wagner Feasibility Study (2006) TransGrid Needs Report (2009)

#### Appendix B

URS Consultation Report (2009) TNS Consultation Report (2009)

#### Appendix C

Threatened Species Lists

#### Appendix D

**Biodiversity Constraints Mapping** 

#### Appendix E

Environmental and Heritage Management Constraints Report (2009)

#### Appendix F

Landscape and Visual Constraints Report (2009)





#### Introduction

#### 1.1 Project Background

TransGrid is the owner, operator and manager of the high voltage electricity transmission system throughout New South Wales, connecting generators, distributors and major end users.

URS Australia Pty Ltd (URS) has been commissioned by TransGrid to provide environmental consultancy services in relation to the establishment of a 330kV transmission line between Dumaresq Substation near Bonshaw and Lismore Substation together with associated substation works (**Figure 1-1**). The new transmission line is required to improve the reliability of electricity supply to Far North NSW.

Initial constraints mapping and route investigations have been completed. A Study Area has been identified for a new line between Dumaresq Substation and Tenterfield (Study Area West) whilst the Tenterfield to Lismore section of the line will utilise the existing, but widened, 132kV easement (Study Area East). The purpose of this report is to present the constraints identified within the Study Area as a result of the environmental, consultation and design work undertaken to date and to identify a preferred corridor between Dumaresq and Tenterfield within which further environmental and design work will be undertaken in order to identify a 60m easement for the proposed transmission line.

The project is defined as a major infrastructure development under Ministerial Order No.96 and therefore Part 3A of the *Environmental Planning and Assessment Act 1979* applies.

#### 1.2 Project Need

TransGrid is constantly monitoring the demand for electricity in NSW with its planners forecasting the future demand for electricity. The forecasted growth in the demand for electricity in the Far North of NSW is 4.6 per cent per annum, more than double the NSW average.

While TransGrid's high voltage electricity transmission network is currently capable of adequately supplying the Far North of NSW, upgrades and additions to the existing electricity transmission network will be required to ensure the continued reliability of electricity supply.

The Far North of NSW region's population is expected to grow by over 60,000 people by 2031. TransGrid needs to upgrade the region's electricity supply to meet the growing energy needs of the area, in particular Lismore.

TransGrid has identified that the installation of a 330kV transmission line, linking Lismore with Dumaresq Substation, would reinforce the network and cater for the forecasted population growth in the Far North of NSW. The Final Report (2009) which identifies emerging limitations within the transmission network and the development of electricity supply to the NSW Far North Coast post 2012 is provided in **Appendix A**.

#### 1.3 Feasibility Study

In 2006 a study was undertaken to investigate the feasibility of securing a transmission line route between Dumaresq Substation and Tenterfield. The Feasibility Study was undertaken by Connell Wagner Pty Ltd and comprised a desk-based investigation at a regional level to determine potential line options.



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