

# **Biomass Fuel Availability**

**Berlin, New Hampshire**

Prepared for:  
Clean Power Development

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Prepared By:

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## **Executive Summary**

Innovative Natural Resource Solutions LLC (INRS) conducted an independent evaluation of the availability and pricing of Biomass for Clean Power Development's proposed biomass facility in Berlin, NH.

Coos County, New Hampshire has long served as the wood basket for forest industries, including two New Hampshire pulp mills that recently ceased operations on a permanent basis. The loss of these markets, coupled with increased interest in renewable energy generation in the state and region, has led to a focus on the opportunities for biomass energy production in Coos County.

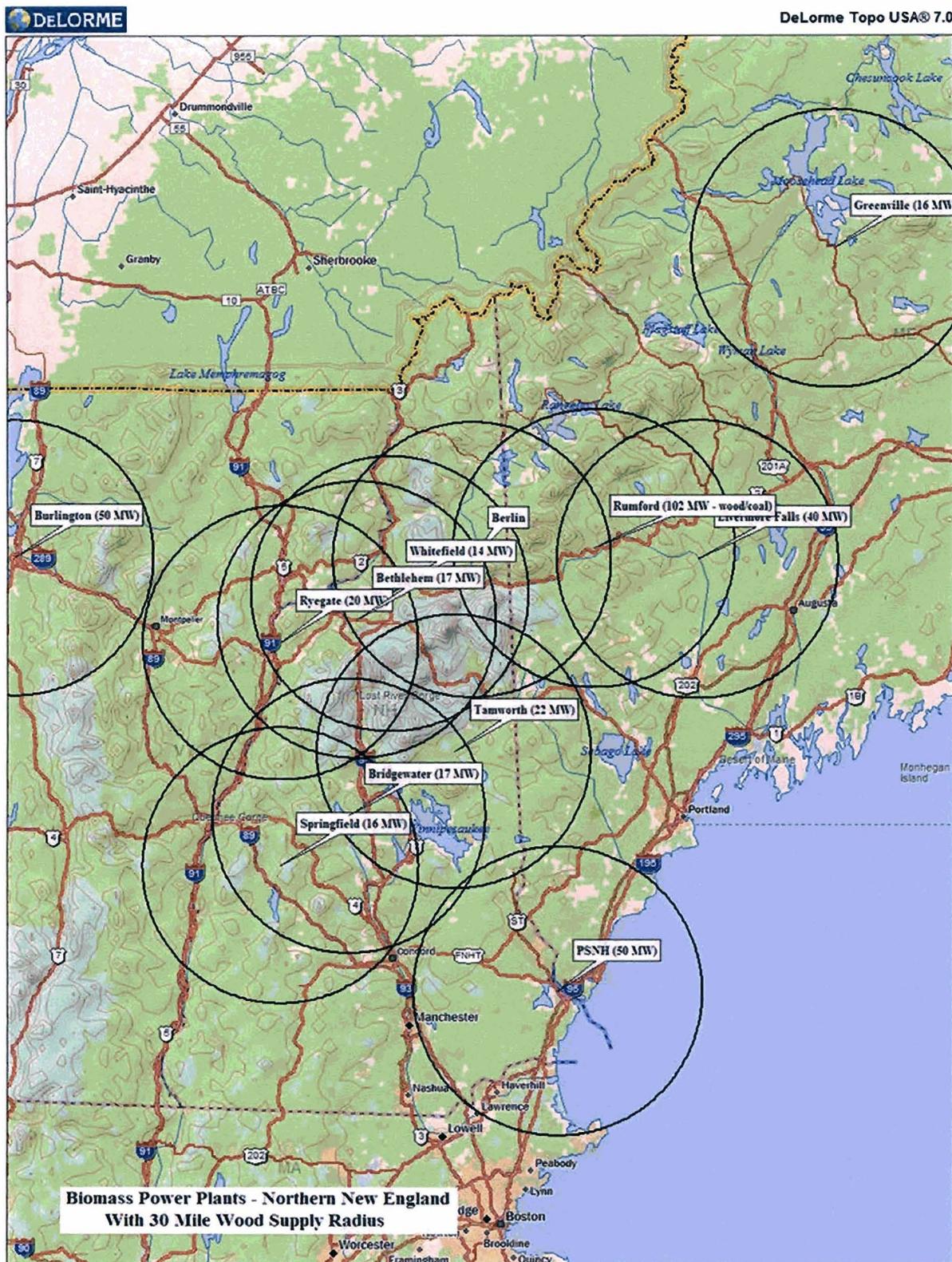
In order to provide biomass fuel at an economically acceptable price, suppliers rely upon higher value markets – notably sawlogs and pulpwood – to help support the cost of timber harvesting operations. When a tree is felled, a number of products can be derived, including high value sawlogs and lower value pulpwood. On many logging jobs, the portions of the tree that do not meet the specifications of these higher value products can be chipped and used as biomass fuel. In order to remain economic, loggers involved in forest management operations need these other markets.

Recognizing this relationship, INRS used actual Report of Cut data for Coos County from 1998 – 2005 (the last year complete data is available for). Using this data, which reflects actual logging activity in Coos County, INRS estimates that enough biomass fuel is potentially available from additional residue chipping, combined with re-direction of some pulpwood to the biomass market, to generate nearly 30 MW of power production.

Interviews with local suppliers, conducted for this project by North Country Procurement, Inc. indicate that this volume of wood is likely available at \$32 per green ton (delivered, assuming diesel costs at \$3.50 per gallon).

INRS notes that there are a number of efforts publicly announced in Coos County that expect to use wood well in excess of the volumes noted above. In INRS' opinion, finding a supply of biomass to sustainably source these facilities would require an increase in biomass prices to levels that INRS considers economically unsustainable, importing wood from outside of the region (with the associated increase in trucking cost this will bring), improvements in the efficiency of biomass conversion technologies, or significant changes in harvesting patterns.

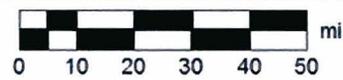




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