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August 28, 2008 From: Luella Dooley Idooley@atcllc.com

## American Transmission Co. to begin construction on cost-saving power line Line will enable high-voltage connection to regional generation sources

MADISON, Wis. – American Transmission Co. will begin construction in early September of a new, 35-mile high-voltage electric transmission line in south central Wisconsin. The line will allow local electric distribution companies to access lower-cost power produced in the region by extending an existing transmission connection to Illinois.

"By reducing transmission congestion and increasing transfer capacity, this project will improve access to lower-cost energy," said Mary Carpenter, ATC local relations. "We will do our best to inform landowners of the impact of our work, while keeping disruptions to a minimum as we complete the project."

The line is the first of its kind in the Midwest. Until this project, transmission lines in the region have almost exclusively been built to enhance reliability of electrical power in the area. Although improved reliability will be a by-product of the project, economics drove the decision to build. Local electric utilities will save through improved access to the wholesale electricity market and their savings will be passed on to end-use electricity customers.

The 345-kilovolt circuit will be built on an existing transmission line right-of-way between the Rockdale Substation in the Town of Christiana in Dane County and the Paddock Substation located in the Town of Beloit in Rock County. The lines that extend south out of the Paddock Substation into Illinois create a path for importing power into Wisconsin.

Construction will begin with preparation of the rights-of-way for the line with tree trimming and pouring the foundations for the poles and is projected to be in service in 2010.

Anticipated savings from the approximately \$133 million project are expected to more than pay for its development.

Note to editors: A map and additional information on the Paddock-Rockdale project is available at www.atc-projects.com

Chio Power Siting Board (Upil 27, 2004) 3.24 mile line for 138 KU is \$ 15 million \$4.62

ATC's other proposal for a 345-kilovolt line between the Rockdale Substation and the West Middleton Substation in the town of Middleton (Rockdale – West Middleton project) is under regulatory review. A decision on the project is expected sometime in 2009.

ATC owns, operates, builds and maintains the high-voltage electric transmission system serving portions of Wisconsin, Michigan, Minnesota and Illinois. Formed in 2001 as the nation's first multi-state transmission-only utility, ATC has invested \$1.7 billion to improve the adequacy and reliability of its infrastructure. ATC now is a \$2.2 billion company with 9,350 miles of transmission lines and 500 substations. The company is a member of the Midwest ISO regional transmission organization, and provides nondiscriminatory service to all customers, supporting effective competition in energy markets without favoring any market participant. For more information, visit our Web site at <u>www.atcllc.com</u>.

# # #

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# **Siting of Electric Transmission Lines**

## **Program Review and Investigations Committee**

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### **Project Staff**

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Greg Hager, Ph.D. Committee Staff Administrator

### **Research Report No. 348**

## Legislative Research Commission

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Legislative Research Commission Program Review and Investigations

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Proposed Guidelines and Agreements for Small Grid-Connected Renewable Energy Systems

Final Report 10 KVA single 10 KVA single

December 2004

Robert Passey<sup>1</sup> David Roche<sup>2</sup> Muriel Watt<sup>1</sup> Ted Spooner<sup>3</sup>

<sup>1</sup> Centre for PV Engineering <sup>3</sup> School of Electrical Engineering University of NSW Sydney NSW 2052

> <sup>2</sup> Greenwatt Pty Limited 31 The Ridge Helensburgh NSW 2508

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# Development of a Standard Connection Agreement for Small Grid-Connected Renewable Energy Systems

**Discussion Paper** 

January, 2004

Robert Passey<sup>1</sup> David Roche<sup>2</sup> Muriel Watt<sup>1</sup> Ted Spooner<sup>1</sup>

<sup>1</sup> School of Electrical Engineering University of NSW Sydney NSW 2052

> <sup>2</sup> Greenwatt Pty Limited 31 The Ridge Helensburgh NSW 2508

area will become the location for supporting services and fabrication facilities and also expansion of commercial and administrative facilities. Presently within the City of Gunnison, buildings account for about 80% of GHG emissions (ORE 2008, appendix G). Generally, across the nation, buildings and transportation account for about 70% f energy use (Carlisle et al. 2008, v).

#### KEY ASSUMPTIONS RELATED TO GHG REDUCTION GOALS

Achievement of the expressed goal implies provision of energy requirements for future development must occur in a manner that actually does better than simply achieving a net energy-zero GHG emissions. New development must contribute to reducing the GHG emissions from within the present city. Provision must also be made for reducing the GHG emissions from activities off-site of new development but associated with it. An example is driving to shopping centers.

New development must be of a "smart and sustainable community" design. It must be powered by renewable energy with and integration of power systems for homes, economic activity, and transportation (Carlisle et al, 1). Beyond this, the concept is a systems approach toward addressing energy requirements on a community level, linking homes and nonresidential and uses, and linking transportation energy requirements (Carlisle et al. 2008, 1). All this requires appropriate supporting supply actions and generative supply actions. The sources for must renewable energy in the Gunnison Community's future is expected to be solar and geothermal. Most other renewable sources do produce some GAG emissions. What other renewable energy sources produce GHG emissions? Producing any device to harvest renewable energy emits GHG's as a by-product of manufacture. Once installed and operational hydroelectric dams, wind turbines, and solar panels emit no GHG's.

New development must be capable of meeting 100% of its service requirements for electrical power and heating with renewable resources and also contributing toward meeting existing local requirements. What does the Gunn son city municipal code hold in regards to regulation of new development? What is required to bring This means the

promotion of installation of micro-cogeneration of electrical power and heat within individual buildings, complexes, and even by household users. Simultaneous production of power and useable heat can improve energy efficiency of production from less than 35% to more than 80% and promotes energy conservation with the reduction of GHG emissions.

#### ACTIONS TO SUPPORT SUPPLY

- Achievement of the goals for GHG emissions and energy efficiency for all new development over the period for goal achievement within the city, its future annexations, and within immediate surrounding area, should be expressed as a priority in the City's Master Plan, in the City's Zoning and Building Codes, in service area agreements, and in relevant Intergovernmental Agreements such as for the 3- Mile Planning Area. For example, all new construction and development, even of infrastructure such as roads, should utilize a minimum of 50% of all recycled nonhazardous construction or demolition debris materials and a minimum of 5% of total project costs must be for salvaged, recycled, refurbished, or reused materials and/or materials with post-consumer recycled content and sounds and a

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(NH Department of Environment, 2008,

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- Requirements of new development for electricity and heating and cooling can

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