



Pelastar by Glosten Associates, Inc.

Laura A. Chappelle

616/336-6920

lachappelle@varnumlaw.com

Jeffrey A. DeVree

616/336-6566

jadevree@varnumlaw.com

Matthew B. Eugster

616/336-6821

mbaugster@varnumlaw.com

Bruce Goodman

616/336-6574

bgoodman@varnumlaw.com

Randall W. Kraker

616/336-6510

rwkraker@varnumlaw.com

Timothy J. Lundgren

616/336-6750

tjlundgren@varnumlaw.com

Richard P. Manczak

248/567-7826

rpmanczak@varnumlaw.com

Toni L. Newell

616/336-6815

tnewell@varnumlaw.com

Jack D. Sage

616/336-6557

jdsage@varnumlaw.com

Eric J. Schneidewind

517/482-8438

ejschneidewind@varnumlaw.com

Matthew D. Zimmerman

616/336-6536

mdzimmerman@varnumlaw.com

Watt's New? *Michigan Energy News*

Natural Gas Power Plant Approval Case Gets Started

The first hearing at the Michigan Public Service Commission (MPSC) regarding the application of Consumers Energy to build a 700 MW natural gas-fired power plant (Case U-17429) occurred August 19. Twelve intervenors were granted party status: the Michigan Energy Innovation Business Council; Energy Michigan; Attorney General for the State of Michigan; Association of Businesses Advocating Tariff Equity (ABATE); Midland Cogeneration Venture Limited Partnership; Renaissance Power LLC; New Covert Generating Company LLC; Interstate Gas Supply, Inc.; First Energy Solutions Corp.; Michigan State Utility Workers Council; Sierra Club; National Resources Defense Fund; and Michigan of Environmental Council. Potential issues to be raised by the intervenors include the assumptions in the filed Integrated Resource Plan on:

- alternative and renewable energy generation availability and costs;
- the limitations of the customer choice program;
- the closure of seven coal plants with a total capacity of 950 MW; and
- the impact of energy optimization and conservation on future load demand.

ABATE has indicated it will be filing a Motion for Summary Judgment seeking the dismissal of the application, asserting that Consumers Energy has not properly shown a need for a new power plant. Assuming the case is not dismissed, a schedule has been set calling for cross examination of witnesses the second week of December, and a decision by the MPSC on or before the 8th of April, the statutory deadline for a decision on the Certificate of Necessity request. See www.tinyurl.com/mpsc-con

Deep Water Offshore Floating Wind Turbines Showcased

On August 15 Detroit-based Charles Nordstrom, P.E. of Glosten Associates Inc. (naval architects and marine engineers out of Seattle) presented the latest design and deployment plans for the Pelastar floating wind turbine system at the Michigan Alternative and Renewable Energy Center in Muskegon. Emphasizing the opportunity to locate near load demand, Nordstrom explained the system avoids the difficulties of offshore construction and assembly by allowing the floating platform to be build dockside, with tower, nacelle and blades attached by a land-based crane. The entire assembly is then floated to its location and tethered to the lake or sea bed. The first 6 MW demonstration project, supported by Alstom Wind, NREL, BP, Rolls-Royce, Shell, Caterpillar, and others is targeted for offshore at Cornwall, England, in late 2015. Cost of energy estimates for first generation offshore wind farms is \$0.170 per kWh, and below \$0.13 in the second generation design for 10 MW wind turbines. The floating platform must be in at least 50m of water depth, and can be deployed at up to 500m depth. See www.pelastarwind.com

Cellulosic Ethanol Plant Loses Partner

Mascoma Corporation has lost a major funding source in its efforts to build a 20 million gallon ethanol plant in Kinross. Valero Energy Crop has pulled its \$50 million investment in the project. An IPO for Mascoma that would have raised \$100 million has been placed on hold. The company has stated it will not proceed with the project until all funding is secured. The total cost for the facility, which has \$120 million in public funding pledged, is \$232 million.

"This system is the largest on a college campus in the United States. It's the largest in volume and in energy output."

Dana Kirk, Department of Biosystems and Agricultural Engineering, MSU

Anaerobic Digester Opens at MSU

Michigan State University has commissioned an anaerobic digester to create energy for its East Lansing campus. The digester will utilize about 17,000 tons of organic waste to generate 2.8 million kilowatt hours of electricity per year. The organic material used by the system includes cow manure, food waste from several campus dining halls; fruit and vegetable waste from the Meijer Distribution Center in Lansing; and fat, oils and grease from local restaurants. It will take 20 to 30 days to digest the material in the 450,000 gallon tanks. Total cost of the project was about \$5 million, and is expected to pay for itself in less than 15 years. MSU is also involved in a similar project in Costa Rica. that will provide power to a local village.

Michigan Shorts

Orisol Energy US, Inc. of Ann Arbor has been named as one of eight wind developers eligible to participate in the upcoming lease sale of 112,8000 acres of offshore Virginia for commercial wind energy leasing. DTE Energy plans to construct a 502 kw ground-mounted solar installation in Sigel Township on farm acreage as part of its 15 MW utility-owned solar initiative. NextEnergy has its MATch (Michigan Accelerating Technologies) Energy Grant program to provide matching funds for federal funding of advanced energy research, development, and demonstration programs. University of Michigan has received a National Science Foundation four-year, \$2 Million grant to determine what combinations of algae make the most efficient fuel source.

Lights Out at Detroit's Municipal Utility?

The Detroit Public Lighting Department (PLD) currently serves 115 customers, including: Detroit Public Schools; Joe Louis Arena; Cobo Hall; the Detroit Institute of Arts; Wayne State University; McNamara Building Federal Building; and the city's traffic signal system (almost 1300 intersections). The Detroit Emergency Manager recently notified DTE Energy Company that PLD will be winding down its electricity distribution and transmission services and requested that DTE provide service to PLD's customers. The switchover will take five to seven years, as DTE will replace the PLD grid over time. How DTE will recover the costs of the transfer and upgrades has become an issue to be decided by the MPSC in Case No. U-17427. See www.tinyurl.com/mpsc-pld

The Incredible Shrinking Renewable Energy Surcharge

Consumers Energy is asking to eliminate its authorized renewable energy surcharge beginning in July 2014. The residential charge under PA 295, was initially pegged at \$2.50/month, then lowered twice to its current \$0.52/month charge. Meanwhile DTE Energy has asked the Michigan Public Service Commission to lower its monthly residential renewable energy surcharge from \$3/month to \$0.43/month. Commercial and industrial surcharge reductions are also being requested by both utilities.

Made in Michigan Microgrid Under Development

In 2006, NextEnergy in Detroit was contracted by TARDEC and the Defense Logistics Agency to develop equipment to provide US-grid quality power in remote locations using renewable and conventional power sources. Although the project was successfully tested, it was too large and too heavy to be deployed in the field, as it required a 20-foot long container for shipping. But the concept of an intelligent management for remote power systems had been proven and the Tactical Modular Mobile Microgrid was born. TM3 Systems of Royal Oak is now working to reduce the size and commercialize the concept. The building blocks for its system are four-foot cubes capable of managing up to 360 kW of generation. By metering and controlling both inputs (generators, solar panels, and battery banks), and outputs (downstream loads), this "microgrid," is more reliable, efficient, configurable, and controllable than a typical remote power system. It can use dissimilar power sources (fossil fuel generators, solar arrays, and batteries) to reduce fuel consumption while supplying uninterrupted power to critical assets in remote locations.

Michigan Energy Venues

- *Great Lakes Renewable Energy Association Meeting & White Bridge Hydro Tour*, Flat River Grill, Lowell, Noon, August 23. www.glrea.org/
- *Joint Meeting: West Michigan Bio-Energy Consortium; West Michigan Solar Supply Chain; West Michigan Wind Manufacturing Network*, Varnum Law, Grand Rapids, Noon, September 19. Email: chapla@rightplace.org
- *Energy Management Technologies*, Michigan Energy Forum, Ann Arbor, 5:00 PM, September 12. www.annarborusa.org
- *The Battery Show*, Suburban Collection Showplace, Novi, September 17-19. www.thebatteryshow.com/
- *Sustainability Strategies: For People, Profit, & Planet*, Lawrence Technological University, Southfield, September 27-28. www.sustain4PLtu.edu

"We see an incredible opportunity to increase the efficiency of power distribution in off-grid power applications that saves fuel and increases the effectiveness of those systems."

Nate Lowery, CEO of TM3 Systems

