

## Renewable Energy: The Foundation of a Sustainable Economy

Putting the **REAL**  
in **RenEwAbLes**

**ONE-DAY CONFERENCE!**

Hosted by—

Columbia Water & Light, University of Missouri, Department of Soil, Environmental and Atmospheric Sciences and the Missouri Department of Natural Resources

**Monday, March 26, 2012**  
**8:00 a.m. — 4:30 p.m.**

(Registration opens at 7:30 a.m.)

Christopher S. Bond  
Life Sciences Center

University of Missouri—Columbia

[www.AdvancingRenewables.org](http://www.AdvancingRenewables.org)

573-882-4349

# SPEAKERS AND TOPICS

## Renewable Energy, the Cornerstone of Sustainability

• *Mark Z. Jacobson, Stanford University*

On the premise that it isn't 'if', but 'how', the world can attain the 100% renewable energy mark within the next thirty years, noted author and lecturer, Mark Jacobson, will share details of his research into sustainable energy potentials on a global scale. Be prepared to think big, as Mark explores opportunities that exist on the terawatt scale.

## Turning Annually Renewable Biomass into an Engineered Fuel

• *Nancy Heilmann, EnginuityWW*

There are myriads of engineering challenges to overcome in considering utility scale production of energy from farm harvested crops. It is no small feat to process these annually renewable crops into a durable engineered solid fuel, so that biomass can be economically transported from the farm to power plant or fuel conversion depot while withstanding the rigors of mechanical handling systems at both ends. Hear the how, the what, and the why of a new technology aimed at conquering this daunting task.

## Super Sizing Solar

• *Dan Stokes, (formerly) Columbia Water & Light*

• *Tom Blair, Free Power Company, Inc.*

Free Power Company is working with Columbia Water & Light officials to overcome many issues surrounding the large scale deployment of solar installations including design, siting and infrastructure development at multiple sites in and around Columbia. Eight different sites, ranging in size from 100 Kilowatts to more than 3 Megawatts, are being considered for the project at this time. Find out the breadth and scope of this eye opening endeavor from the principal parties involved.

## Midwest Wholesale Energy Market and Dispatchable Renewable Resources

• *Sidney Jackson, Midwest Independent System Operator (MISO)*

MISO is responsible for delivering safe, cost-effective electric power across 12 US states and a Canadian Province. MISO actively coordinates with its membership to fulfill transmission planning requirements; new generation interconnections to the high voltage electric grid; as well as daily commitment and dispatch of a variety of generation resources including renewables. This presentation will focus on a relatively new MISO initiative entitled Dispatchable Intermittent Resources, where forecast dependent resources have increased their predictability and their dispatch capability.

## Rapid Growth in Lower-Speed Wind Technologies

• *Jeff Brown, Nordic Windpower*

New developments in wind technologies are creating higher efficiencies and enhanced economics. Turning a profit at lower wind speeds could translate into a boom to many Midwestern areas that have to-date missed out on development opportunities. While states on the coasts are looking to deploy bigger turbines to capture offshore wind, how much of the Midwest's potential can be developed through lower speed technologies?

## Show-Me's Utility Efficiency Action Plans

• *Pat Justis, AmerenUE*

• *KCP&L Representative*

Missouri's ranking in energy efficiency may be moving up if recently filed plans from the state's two largest electric utilities come to fruition. The mega-million dollar strategies could help reduce energy costs to millions of Missourians by employing legions of energy conservation professionals to reduce energy loss in homes and businesses. Come hear the details from AmerenUE and KCP&L as they present their three-year plans for investing in energy efficiency.

## Successful Utility-Scale Efficiency Programs

• *Stacy Paradis, Midwest Energy Efficiency Alliance*

Get a bird's eye view of what is going on around the country in terms of successful utility scale energy efficiency programs. All programs that provide "wins" for efficiency, ratepayers and the utilities are the target for this presentation. Find out how reducing energy use is a real part of the renewable equation.

## Biomass Energy Forum

• *Panel Discussion: Moderated by Hank Stelzer, University of Missouri*

With its fertile soils and annual rainfall the American Midwest is renowned for its biomass potential. Everyone agrees that biomass is a precious resource that we have to use wisely which is why this panel is so important. It provides a forum for both sides of the conundrum of how biomass is best used for the long term viability of our region. Expert panelists discuss the pros and the cons of using biomass as a renewable energy resource in the Midwest.

## Advancing Renewables in the Midwest

MU Conference Office  
344 Harnes Center  
Columbia, MO 65211

# REGISTRATION FORM

Advancing Renewables in the Midwest

Monday, March 26, 2012

Christopher S. Bond Life Sciences Center

University of Missouri–Columbia



Name: \_\_\_\_\_ Organization: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Daytime Phone: (\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

## ⇒ REGISTRATION FEES

**PARTICIPANT FEES:**      **ENERGY PROFESSIONAL**      **NON-PROFESSIONAL**

Early Registration.....  \$75 .....  \$50  
(on or before 2/20/12)

Regular Registration.....  \$95 .....  \$70  
(on or before 3/16/12)

Late Registration  
or at the door .....  \$110 .....  \$85  
(beginning 3/17/12)

**EXHIBITOR FEES:**  
(Includes 8' table & 2 complimentary registrations)

\$250.00 Exhibitor—Professional

\$100.00 Exhibitor—Nonprofit

## **PARKING PASS:**

\$5.00 One-Day Parking Pass

**TOTAL FEES: \$** \_\_\_\_\_

## ⇒ LUNCH

Do you plan to attend the lunch that is included with your registration fee?     Yes     No

Do you have any dietary restrictions that we should be aware of?

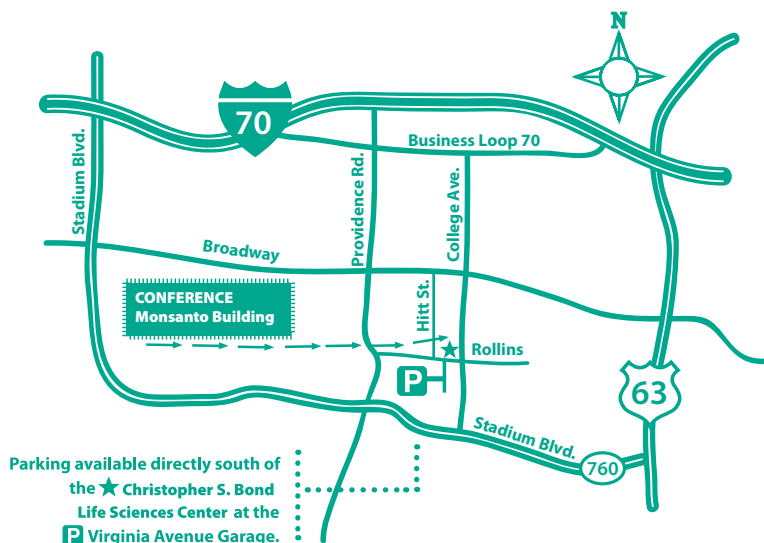
If so, please indicate here \_\_\_\_\_

(Send us this part)

(Keep this part)

## **Cancellation Policy:**

We will refund your registration fee if the MU Conference Office receives your written request by March 12, 2012. You are responsible for payment on purchase orders unless cancelled in writing by March 12, 2012. We will make no refunds after this date, but substitutions are welcome.



Parking available directly south of the ★ Christopher S. Bond Life Sciences Center at the P Virginia Avenue Garage.

## ⇒ HOW TO REGISTER

• Online at website: [www.AdvancingRenewables.org](http://www.AdvancingRenewables.org)

• Fax completed form with credit card information to: (573) 882-1953

• Mail completed form and payment to:

**Advancing Renewables in the Midwest, MU Conference Office, 348 Hearnes Center, Columbia, Missouri 65211**

## ⇒ PAYMENT METHOD

Check enclosed (payable to the University of Missouri)

Bill my organization (a valid purchase order must be included)

ISE (for University employees only)

Department name and address \_\_\_\_\_

MO code \_\_\_\_\_ Account code \_\_\_\_\_

Credit card:  Mastercard     Visa     Discover

Credit card # \_\_\_\_\_

Expiration date \_\_\_\_\_ CSV Number \_\_\_\_\_

Card holder name (please print) \_\_\_\_\_

Authorized signature \_\_\_\_\_

Address if different than registrant \_\_\_\_\_

## **Office Use Only**

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## Interested in a booth?

Don't pass up this opportunity to display your renewable energy products and services to people with similar interests.

To reserve a space for your company or organization, fill in the exhibitor line on the registration form. If you have questions, please call the MU Conference Office at (573) 882-4349 or email [muconf3@missouri.edu](mailto:muconf3@missouri.edu).

## Speakers and Topics (continued)

### **MORE to Come!**

Additional conference presentations from the Wind/Efficiency/Biomass and Solar platform—

- *What to expect from state energy offices after ARRA...*
- *How electric vehicles fit into the renewable energy picture...*
- *How the Solar America program is affecting Midwestern cities...*
- *Grid connected farm based anaerobic digestion...and MORE!*

## Putting the REAL in RenEWables

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