



August 2013

Utility Clean Energy Benchmarking Report *Produced by Ceres in association with Clean Edge*

Background

Since 2002, Ceres has published a series of benchmarking reports focused on the emissions performance of the 100 largest power producers in the United States. These reports have typically been produced on an "every other year" basis and have been well received by the utilities and their regulators, industry analysts, investors and other NGOs.

Clean Edge, Inc. has tracked and benchmarked the clean-tech ecosystem since the firm's inception in 2000. It launched its first stock index in 2006 and its state leadership index in 2010. The NASDAQ[®] Clean Edge CELS stock index tracks US based clean-energy companies and the GRID stock index tracks global smart grid infrastructure firms. The *U.S. Clean Tech Leadership Index* benchmarks all states and the top 50 metro regions on their clean-tech deployment, policies, and investments.

Currently, no benchmarking report effectively covers the performance of electric distribution utilities in the area of clean energy (clean energy, advanced infrastructure, and distributed energy resources) or ranks the comparative performance of utilities in these critical areas. The lack of reporting leaves regulators, analysts, investors and public interest groups without an effective means to evaluate the overall clean-energy performance of utilities.

It is the intent of Ceres and Clean Edge to develop a benchmarking report similar to the Ceres <u>Benchmarking Air Emissions Report</u> and the Clean Edge <u>U.S. Clean Tech</u> <u>Leadership Index</u> using publically available information in the area of utility clean energy performance. This "Utility Clean Energy Benchmarking Report" will evaluate the clean energy performance of 25 of the largest investor owned public utility holding companies (IOUs) selected by MWh sales and will compare and contrast their performance.

We are aware of the work of Bloomberg New Energy Finance, the Carbon Disclosure Project, and other efforts tracking the energy and utility space, but none comprehensively track the top U.S. IOUs on their clean energy activities.

The Utility Clean Energy Benchmarking Report

The report will begin with a clear and convincing business case for electric utilities, regulators, investors and consumers to embrace the need to enhance U.S. investment in non carbon emitting electric generation and distributed energy resources including wind, solar, biomass and geothermal, smart grid, demand side management, load management and energy efficiency.

The 2010 Ceres report, *The 21st Century Corporation: The Ceres Roadmap for Sustainability*, focused on setting new standards and expectations for business leadership. The report provided a guide, which is still relevant today to companies in their journey to comprehensive sustainability. One priority highlighted in the report and especially relevant for electric utilities is performance in the energy area including achieving the following targets by 2020:

- 50% improvement in energy efficiency
- 25% lower carbon emissions
- 15% reduction in energy demand
- 30% of energy supplied by renewable sources

Ceres and Clean Edge expect that electric utilities that are successful in achieving these targets will also be some of the best performing companies of the 21st century. It is our belief that clean energy performance will be a key indicator of the future business success of these companies.

The 2013 *U.S. Clean Tech Leadership Index* by Clean Edge highlighted the steep increase of clean energy, advanced transportation, and grid intelligence technologies in states and metro regions across the U.S. For example, more than 10 states now generate 10% or more of their electricity from wind, solar, and geothermal, with nearly half of all electricity capacity added in 2012 coming from renewables. This steep increase in clean energy requires that stakeholders have a deep understanding of utilities' initiatives and activities.

The Utility Clean Energy Benchmarking Report is a follow-on report to the recent Ceres publication Practicing Risk Aware Electricity Regulation: What Every State Regulator Needs to Know. This earlier report provides state regulatory utility commissioners with a thorough discussion of electric industry risk, and suggests an approach--"risk-aware regulation"--whereby regulators can explicitly and proactively seek to identify, understand, and minimize the risks associated with electric utility generating resource investment.

The *Utility Clean Energy Benchmarking Report* will identify 25 of the largest IOU's in the US by electricity sales and, utilizing publicly available data, compile clean energy statistics for each of the companies. These companies currently sell slightly more than half of all the electricity in the U.S.

We will be focusing on the electric distribution companies rather than the traditional generating companies in this report. We are taking this focus because we expect these distribution companies to be important to the future of clean energy as the gird evolves including the redistribution and resale of clean energy and the continued supply of critical electrical distribution network services.

The report will identify key clean energy metrics for each of the companies. Current prospective metrics grouped by general category include:

Clean Energy Generation and Capacity (Owned & Operated/Purchased/REC)

- Concentrated Solar Power
- Solar PV
- Wind
- Geothermal
- Biomass

Advanced Infrastructure and Distributed Energy Resources

- Smart meters
- Green pricing
- Demand side management
- Load management

Energy Efficiency

- Customer Energy Efficiency Program and Incentives
- Utility Distribution Asset Efficiency (Line Loss)

We have conducted preliminary due diligence on the publicly available sources of information to be used in developing this report. Although additional research is needed to qualify, quantify and identify publication dates for this data, we believe that sufficient public sources of data exist to report on the metrics identified above. Some of the sources of information include USDOE, EIA, CDP, EPA, Ceres Benchmarking Air Emissions Report, ACEEE, ACORE and the utilities. All data used in this report will be properly attributed to its source.

Each of these metrics will be presented in absolute and, when applicable, in a normalized form in order to help understand the size of the metric and its relative nature compared to the other companies. Each company will be assigned a ranking for each metric.

For this initial report, we will be reporting on 2011 data, or more recent data when available, for each of the metrics.

Benefits of the Report

This report is expected to provide much needed transparency on utility clean energy activity and will specifically provide the following benefits:

- **Regulators** The report will provide utility regulators with an opportunity to evaluate the performance and energy procurement practices of their regulated utilities within the clean energy space as measured against their peers, evaluate the performance of their geographic region compared to other geographic regions and, as a result, better determine how utility performance in the clean energy area can be improved among their regulated utilities. Utility regulators hold the "purse strings" of the utilities that they regulate and are always hungry for information regarding the performance of their regulated utilities.
- **Utility Industry** The report will provide a good "snapshot" of relative performance among electric utilities in this area of performance. This snapshot should be useful to utility senior management in gauging how well one company is performing against their peers in this area.
- **Consumers** The report will provide simple information to help consumers make decisions about the clean energy offered by their utilities.
- **Investors** The report will provide investors with improved information on utility energy planning patterns and enable investors to better judge financial risk in a particular utility energy supply and the efficiency of such supply.
- **Clean Energy Advocates** The report will permit access to the clean energy performance of utilities and enable the advocates to affect and influence clean energy policy.

Schedule

The current target for publication of this initial report is October 2013. With industry support, Ceres and Clean Edge hope to release the report annually.

To release the publication this Fall the development timeline includes:

Project Timeline - Fall 2013	August	September	October	November	
Compile Datasets and Metrics	\leftarrow and earlier				
Draft Report					
Partner Review of Draft Datasets and Report					
Finalize and Design Report					
Release Publication					
Promote via Webinar and other activities			and la	and later $ ightarrow$	
Advisory Support for Project Partners				and later $ ightarrow$	

Utility Holding Companies Included:

AEP Ameren CMS ConEdison Dominion DTE Energy Duke Energy/ Progress Energy Edison International Entergy Exelon/ Constellation First Energy MidAmerica/ Pacificorp National Grid NextEra Northeast Utilities/ Nstar OGE Energy Corp Pennsylvania Power & Light Pepco Holdings, Inc. PG&E Corporation Pinnacle West PSEG Puget Sound Energy, Inc. Southern Company We Energies Xcel

About Ceres

Ceres is an advocate for sustainability leadership. It leads a national coalition of investors, environmental groups and other public interest organizations working with

companies to address sustainability challenges. Ceres also directs the Investor Network on Climate Risk (INCR), a network of 100 institutional investors with collective assets totaling about \$10 trillion. The Ceres Electric Power Program has produced a number of groundbreaking reports in the electric utility area including the "Benchmarking Air Emissions" report and the "The 21st Century Electric Utility" report.

About Clean Edge

Clean Edge, Inc., founded in 2000, is the world's first research and advisory firm devoted to the clean-tech sector. For more

than a decade the firm has delivered timely data, expert analysis, and comprehensive insights to governments, corporations, investors, nonprofits, and other key industry stakeholders. The company offers an unparalleled suite of index, benchmarking, custom research, and advisory services including the *U.S. Clean Tech Leadership Index*, annual *Clean Energy Trends* report, Clean Tech Nation Briefing Series, and clean-tech stock indexes with NASDAQ[®].

For more Information on the Utility Benchmarking Report Contact

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