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15 minutes of prepared ANSI remarks | 15 minutes of John Deere remarks | 15 minutes of Q&A

Thank you. Good morning everyone.

It's a pleasure to be here wearing two hats: one as chairman of the ANSI Board of Directors, and the second as a representative of Deere and Company.

As ANSI's chairman, I recognize many of you as members of the Institute:

- NEMA itself has a nearly 70-year history as an ANSI member.
- Some of your organizations . . . Eaton Electrical, Emerson Electric, GE, Rockwell Automation, Siemens, Square D and others are also members.
- In fact, companies in the electrical and electrotechnology sector have grown to represent one quarter of ANSI's total membership.

I also recognize many of you as business partners of Deere and Company and as colleagues in the U.S. industrial sector.

Collectively, U.S. industry employs more than 14.3 million persons at more than 200,000 locations across the United States.

The value of the goods we produce each year is nearly $6 trillion dollars. Of this, we export nearly 17% – roughly $1 trillion.

But there is a cost for our productivity: U.S. industry is responsible for one third of the nation's total energy consumption. We use more energy than any other single G8 nation. We produce 30% of U.S. greenhouse gas emissions. And we use 37% of the nation's natural gas and 29% of the electricity.

The Department of Energy estimates that, by the year 2030, U.S. energy demand will have grown by 34%. This will present compelling challenges for both industry and government.

Like President Bush said during a press conference last month. . . . "When it comes to energy and the environment, the American people expect common sense, and they expect action."

Industry and government must work cooperatively to improve energy efficiency . . . as well as to diversify and expand our range of energy sources.

Jim Pauley – who sits with me as an officer of the ANSI Board – suggested that the time was right for me to provide this group with an update on some of standardization community's recent actions in the areas of energy management.

Jim and I share similar views on the importance of active corporate leadership in standards and compliance activities. As the companies that develop a wide range of energy management equipment, this was the logical audience to bring up to speed on what's happening.

Walt Kozikowski also explained that this group is responsible for taking a comprehensive look at what needs to be done across NEMA's sections to better meet industry needs. You are doing for the electrotechnical industry what ANSI does on behalf of the standards community. It makes sense for each of us to know what the other is working on and which direction we are headed.

Before we continue, I would like to remind you about ANSI's roles and responsibilities. I know that Joe Bhatia, ANSI's president and CEO, spoke with you last year to provide an update on ANSI and its current priorities, so I won't go into an extensive review. But a brief refresher may help to set the stage for this discussion:

- First and foremost, ANSI manages the broad-based standards and conformity assessment systems in the United States. The Institute provides an open and neutral forum where any stakeholders who are affected by an issue can come together to take action.

- ANSI accredits not only standards developing organizations like NEMA, but also certification bodies like Underwriters Laboratories and CSA.

  Our standard-setting bodies span dozens of industry sectors – from screw threads to aerospace vehicles and from nanomaterials to large-scale manufacturing equipment.

And ANSI's accreditation programs work with certification bodies spanning the product, personnel, environmental and quality management system areas.

- Globally, ANSI represents the U.S. in regional standards and conformity assessment organizations in the Americas, the Pacific Rim, and the European Union.

  You probably recognize regional organizations like CANENA[1] and CENELEC[2]. You may be less familiar with SAC, the national standards body in China. Al Skolnik and I just returned from a delegation visit to China where ANSI co-hosted with SAC the "U.S. – China Symposium on Active Industry Participation in Standardization."

- ANSI is also the national member body for ISO, the International Organization for Standardization and, via the U.S. National Committee to the IEC, the International Electrotechnical Commission. These are the bodies where much of the new work on energy management is being directed.

Frank Kitzantides[3] continues to serve as vice president of the IEC and chair of its Standardization Management Board. Under Frank's leadership, the SMB formed earlier this year its first Strategic Group to consider and make recommendations on possible IEC work in the area of "Energy Efficiency and Renewable Resources." NEMA's Ed Gray is the primary U.S. representative to that group.

You may have also heard that the IEC is considering setting up a new technical committee to address work items in the area of ocean energy devices. If approved, the new activity would join wind turbines and solar panels in an expanding IEC portfolio of alternative energy standardization projects.

ISO, too, is turning its attention to standards development in the energy field – though the organization is being careful not to step on the toes of other bodies that are engaged in similar work.

In January, a task force was established under the ISO Council Standing Committee on Strategies to finalize a portfolio and gap analysis that will identify high-level priorities for the development of ISO standards. The group will define how energy-related work will be advanced within the ISO system, and

[1] a coordination body for electrotechnical standards activities in the Americas
[2] the European Standards Organizations for electrotechnical activities
[3] Frank is running unopposed for a second three-year terms as IEC Vice President and chairman of the Standardization Management Board. Though officially retired from NEMA, he does technically still carry the title of "Senior Vice President & Chief Technical Officer."

will also propose opportunities for interaction with relevant stakeholders and possible partnerships with other SDOs and international bodies.

The group is chaired by the ISO Vice President of Policy – a position that is held by my predecessor as ANSI's chairman, Dr. George Arnold. ANSI has named Dr. James Hill, the recently retired acting deputy director of NIST, as the U.S. expert on the task force.

With these two individuals, the U.S. is well positioned to assure that ISO respects the work that has already been done in IEC and other U.S.-based SDOs and that careful attention is given to avoiding duplication and conflict with existing standards.

The effort ahead is to develop a standards and conformity assessment infrastructure that will help to achieve superior energy performance at the industrial level.

The bar has been set high. The hugely successful Energy Star program that was launched in 1992 by DOE and EPA is one of the single strongest programs to build consumer awareness of the need for energy-efficient products.

The program is responsible for an average household savings of $600 annually and a $14 billion savings on residential, commercial and industrial utility bills during 2006. Savings are on track to nearly double again in the next ten years.

Turning its attention to the needs of industry, the DOE launched in the early 1990s a Best Practices program to provide industrial facilities with information and training resources that would help them better manage their energy consumption.

The Energy Policy Act of 2005 empowered DOE's Industrial Technologies Program to help industrial firms reduce the energy intensity[4] of their production activities by 2.5% for each year from 2007 to 2016.

In late 2006, ANSI was invited by DOE to participate in the planning and development of a new *Superior Energy Performance* program that is intended to improve energy management in industrial plants.

[4] In essence, *energy intensity* is a subset of energy efficiency. It is the ratio between the consumption of energy to a give quantity of output. To measure the energy efficiency of a nation, energy intensity is calculated as units of energy per unit of GDP. In 2004, for example, the U.S. consumed 8,553 Btus to produce a single dollar of GDP . . . . this means we needed one million Btus to produce $116.92 of GDP. (Calculations: Wikipedia article on "Energy Intensity")

ANSI sits on the committee with participants from U.S. industry (including automotive companies such as Toyota, GM and Ford; IT companies such as HP, chemical companies, and others) and government agencies (including DOE, EPA and Commerce). Everyone has agreed that there is a need for a consistent, performance-based framework to foster continuous progress in industrial energy efficiency . . . in essence, an energy management standard.

Fortunately, we have an excellent starting point.

A comprehensive energy management standard has been developed by the Georgia Tech Energy and Environmental Management Center, an ANSI-accredited standards developer. ANSI/MSE 2000, *A Management System for Energy* was first published in 2000; an updated revision was published in 2005. Both editions were approved by ANSI to carry the designation of an American National Standard.

The standard establishes benchmarking guidelines and offer companies ways to reduce costs, expand capacity, and improve productivity, quality and operational efficiency – all while making a positive impact on the environment as well as the bottom line.

It employs the same plan-do-check-act approach that is found within ISO 9001 and 14001.

The need for harmonized energy management standards extends far beyond our nation's borders.

The industrial sector alone represents 40% of primary energy use and energy-related carbon dioxide emissions worldwide.[5]

Environmental concerns affect all countries. Reductions in energy use and greenhouse gas emissions have become a global priority.

Several countries are already moving forward to take the lead in energy management implementation.

In addition to the U.S., Denmark, Sweden and Ireland also have standards for energy management. Two more countries, China and Spain, have standards under development.

[5] From a 2006 Lawrence Berkeley National Laboratory study: "Sectoral Trends in Global Energy Use and Greenhouse Gas Emissions."

Building upon the framework of existing national and other related standards, DOE and Georgia Tech have developed a proposal for a new field of technical activity within ISO. The premise is that a single international energy management standard will offer a distinct advantage to organizations that operate in more than one country.

As described in the current proposal, an ISO energy management standard would address:

- energy supply;
- procurement practices for energy using equipment and systems;
- energy use and any use-related disposal issues;
- a measurement system for current energy usage; and
- a measurement system to document, report, and validate continuous energy management improvements.

In accordance with ANSI procedures, a public review and comment on the proposal is now underway.

I've asked Walt to pass along to you the information about how to access the proposal and the accompanying justification study. Comments are due by Friday, July 20th.

To further assist in obtaining broad stakeholder input, the Department of Energy will host an open meeting in July in Washington, DC. Edwin Piñero, the Federal Environmental Executive, is expected to speak.

All comments and input received during the meeting and the public review will be reported to the ANSI committee responsible for considering and approving a final recommendation to ISO.

As one of the primary stakeholder groups, I strongly encourage NEMA and the members of this committee to submit your comments by the July 20th deadline. Your input is essential.

(*pause*)

As a representative of industry myself, I recognize that many U.S. manufacturers – Deere and Co. among them – have long been implementing energy management strategies of their own design. Other organizations may not be so far along. We need to make it easier for more manufacturers to get into the mode of starting energy efficiency and conservations programs, or to enhance their existing programs.

Some will question whether we need another management system standard to do this. Some will say that an international energy management standard is only acceptable if a self-declaration is sufficient to indicate compliance. Others may suggest that a third party is necessary to verify compliance. Until a standard is developed, we can not be sure of its content.

But if a proposal does move forward then we need the result to be a real and sustainable program – one that actually saves money . . . not just a box-checking exercise.

We cannot afford to be short-sighted.

Conservation, energy efficiency and energy management are key focus areas in the standardization and conformity assessment arena today. This means the likelihood is high that someone will eventually present a proposal for standard . . . if not the U.S., then another country.

Experience has shown us what can happen when the U.S. does not step forward in a leadership role.

As some of you may recall, when the work of a new ISO Technical Committee known as TC 176 was just getting underway, American industry was not actively involved. The committee eventually published the ISO 9000 family of standards to address what an organization does to . . . fulfill both customer and regulatory requirements . . . . enhance customer satisfaction, and . . . . achieve continual improvement of its performance.

We learned what can happen when the U.S. is not actively engaged at the ISO table.

When the proposal was made to create a new ISO TC focused on the establishment of an environmental management system, U.S. industry knew what we had to do. The U.S. immediately stepped forward to play a leading role in the development of the ISO 14000 family.

If energy management is going to be addressed on a global scale, then we need to develop a program that industry and policymakers both support – and that makes good business sense.

(*pause*)

Manufacturers operating in the global marketplace have made it clear that they wanted to prove compliance with a single set of requirements regardless of location. If we have to comply with an energy management system, then we want "One Standard—One Test—Accepted Everywhere."

(*begin conclusion*)