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IHS Chemical Week

PRESENT THE AMERICAN CLEANING INSTITUTE'S

ACI CONVENTION NEWS

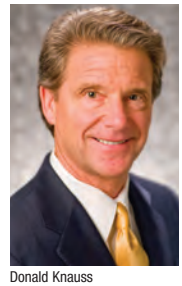
A supplement to IHS Chemical Week
Monday, January 28, 2013

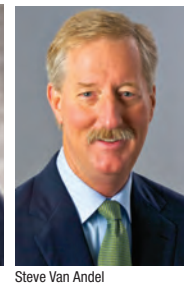
CLEANING PRODUCT INDUSTRY LEADERS TO HIGHLIGHT ACI CONVENTION 2013

The leaders of the global cleaning products industry are in Orlando, FL for the American Cleaning Institute's (ACI) 2013 Annual Meeting & Industry Convention, at the Grande Lakes Orlando.

One of the highlights of Convention Week is the Executive Leadership Panel to be held Thursday, January 31, featuring:


Douglas Baker
Ecolab Chairman and CEO


Donald Knauss
Clorox Chairman and CEO


Steve Van Andel
Amway, Chairman

- **Douglas Baker, Chairman & CEO - Ecolab Inc.**
- **Donald Knauss, Chairman & CEO - The Clorox Company**
- **Steve Van Andel, Chairman - Amway**

The panel will be moderated by veteran broadcast journalist Forrest Sawyer. The conversations with the industry leaders take place during the Annual Meeting & Breakfast, which starts Thursday at 7:30 a.m. in the Palazzo ballroom, salon D.

Industry Experts Zero in on Issues Facing Cleaning Product Supply Chain

Hear how ACI's allied trade associations from Canada, Brazil, Europe, Japan and Australia are addressing challenges to cleaning product makers at the Global Industry Update (Tuesday, Jan. 29, 12:00 p.m., Palazzo D).

Experts from ACI member companies who lead the association's standing committees will outline how ACI is successfully executing key programs and activities during the annual Issues Briefing. (The briefing is Wednesday, Jan. 30, at noon, Palazzo ballroom, salon D).

Educating Today, Sustaining Tomorrow

"Educating Today, Sustaining Tomorrow" is the theme of the 2013 Convention.

"This theme is really showcased throughout Convention Week in our speaker sessions, policy briefings, and committee meetings of company experts," said Ernie Rosenberg, ACI President & CEO. "We're making sure our members have the up-to-date policy information today so they can continue to innovate tomorrow."

ACI 2013

TOM RIDGE, BILL RICHARDSON TO SPEAK AT ACI CONVENTION POLICY FORUM

Former Homeland Security Secretary Tom Ridge (R-Pennsylvania) and former New Mexico Governor Bill Richardson (D) will appear at a special Public Policy Forum at the 2013 Annual Meeting & Industry Convention on Friday, February 1.

The session will be moderated by Fox News political commentator Dana Perino, who served as press secretary for former U.S. President George W. Bush. The morning kicks off with a breakfast at 8 a.m. in the Palazzo ballroom, salon D.

Following the tragic events of September 11th, 2001, Tom Ridge became the first Assistant to the President for Homeland Security and, on January 24, 2003, became the first Secretary of the U.S. Department of Homeland Security. The creation of the country's 15th Cabinet Department marked the largest reorganization of government since the Truman administration and another call to service for the former soldier, congressman and governor of Pennsylvania.

Mr. Ridge is currently the president and CEO of Ridge Global, an international security and risk management company headquartered in Washington, DC. As the company's chief executive, Mr. Ridge leads a team of international experts that help businesses and governments address a range of needs throughout their organizations, including risk management, global trade security, emergency preparedness and response, strategic growth, infrastructure protection, crisis management and other issues that encompass a diverse portfolio.

Mr. Richardson served two terms as Governor of New Mexico (2002-2008); for 15 years in Congress representing northern New Mexico; in 1997 as the U.S. Ambassador to the United Nations, and in 1998 was unanimously confirmed by the U.S. Senate as Secretary of the U.S. Department of Energy.

Mr. Richardson was recently named chairman of APCO Worldwide's executive advisory service Global Political Strategies (GPS) and Special Envoy for the Organization of American States (OAS).

ACI CEO HIGHLIGHTS FOCUS ON SUSTAINABILITY, INNOVATION

Cleaning sector priorities for 2013 include ensuring members can continue to develop innovative and sustainable solutions, while reaching out to the public with more data on cleaning product ingredients and sustainability, says Ernie Rosenberg, president and CEO of the American Cleaning Institute (ACI; Washington).

"Suppliers with sustainable solutions for cleaning product problems will see the most growth," Rosenberg says. "We see sustainability as at the core of where industry is going—not something you 'have to do,'" Rosenberg says.

"We are also putting together a cleaning product ingredient database, which will be of value not only to customers but to industry as well. It gives the public much more ability to pick products that are more sustainable, more price competitive, and more effective as well."

(see full interview on p. 3)

ROSENBERG: ACI FOCUSES ON SUSTAINABILITY, PROTECTING INNOVATION

Cleaning sector priorities for 2013 include ensuring members can continue to develop innovative and sustainable solutions, while reaching out to the public with more data on cleaning product ingredients and sustainability, says Ernie Rosenberg, president and CEO of the American Cleaning Institute (ACI; Washington). Rosenberg outlined industry's top priorities ahead of ACI's annual meeting scheduled for January 28-February 3 in Orlando, FL.

"Suppliers with sustainable solutions for cleaning product problems will see the most growth," Rosenberg says. "We see sustainability as at the core of where industry is going—not something you 'have to do,'" he says. "We are also putting together a cleaning product ingredient database, which will be of value not only to customers but to industry as well. It gives the public much more ability to pick products that are more sustainable, more price competitive, and more effective as well."

Consumer preference for more sustainable, effective and cost competitive products is driving product innovation, Rosenberg says. Industry has narrowed the price differential in some areas between more sustainable and traditional products in response to both customer demand as well as through more innovative approaches, Rosenberg says. "Is every category at the same stage of evolution or developing at the same rate? No, but we see a pattern evolving. We are not just an association representing hard surface cleaners, laundry and dishwashing detergents and industrial cleaners, but increasingly representing and providing a forum for the whole value chain," he says.

ACI also is in constant contact with lawmakers, regulators, and nongovernmental organizations (NGOs), engaging with them constructively, particularly on ways to improve chemical regulation,Rosenberg says.

ACI is working on a pilot project for its draft Charter for Sustainable Cleaning, a voluntary initiative to promote and demonstrate continual improvement in the cleaning product industry's sustainability profile, Rosenberg says. Another priority is to advance the creation of sustainability metrics that will be useful when industry is called upon to detail the sustainability of its business or manufacturing processes. When developing sustainability metrics, the challenge is to avoid channeling innovation too narrowly, while making sure to provide objective measures for sustainability, Rosenberg says.


Rosenberg: TSCA reform is needed, but avoid barriers that would block sustainable products' access to market.

The focus on sustainability and innovation dovetails with ACI's priorities on the regulatory front because it is critical for industry to be able to get new products to market quickly. "A lot of proposals for regulating the chemicals in products would erect barriers to getting things to market, even when those products are less toxic or otherwise improve sustainability," Rosenberg says, referring in part to proposals aimed at overhauling the 1976 Toxic Substances Control Act (TSCA).

Another top ACI concern is the protection of confidential business information (CBI), Rosenberg says. Proposed changes to TSCA have included changes to CBI protection due in part to NGO concerns that industry is using CBI protection to limit public disclosure of product ingredient and safety data. However, ACI and other groups say proposed changes to CBI protection would have an adverse effect on innovation in the United States. "If you want innovation, you want companies to be able to capitalize on their investment. At the same time, a lot of the innovations that are inhibited by the regulatory process are for green products, so it's counterproductive," Rosenberg says. "Nobody is putting more dangerous ingredients in cleaning products, it's just not the way things are going."

Overall, it is also important for the sector that TSCA be modified, Rosenberg says. "It's an arcane law that is difficult to work with. We have a lot of education to do," he says, referring to work with lawmakers and regulators to demonstrate some possible unintended consequences of certain proposed TSCA changes. "Our members really want a credible federal program."

Most agree that there is little chance of TSCA reform legislation advancing this year, but there will be continuing discussions and ACI will be "at the table" during those talks, Rosenberg says. A more time-sensitive issue is the imminent release of California's "Safer Consumer Product" regulations, which may be out as early as the end of January. Those regulations have been the subject of much debate and controversy. "We haven't seen a lot of movement in the direction industry has wanted, but we are in a leadership role in the industry coalition that is working with regulators and NGOs on the rule," he says. "I don't think the regulation coming out will be the last word on the issue, a lot of what will happen will be a function of the amount of resources California can dedicate" to implementing the rules, Rosenberg adds. As with other regulations, it will be important that the regulations rely on sound science so industry has a basis to defend good ingredients and not be made to substitute existing ingredients with alternatives that don't work as well or that are more hazardous.

—KARA SISSELL

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IHS Chemical Week

ATTENDEES CAN HELP "CLEAN THE WORLD"

In between meetings at the ACI Convention, attendees can literally help "Clean the World." We know they'll also be "Cleaning for a Reason."

CLEAN THE WORLD

On Thursday and Friday of Convention Week, attendees can spend a few minutes helping to assemble hygiene kits that the nonprofit group Clean the World will distribute to Families in Transition, a local charity that assists students.

Clean the World (www.cleantheworld.org) collects and recycles soap and shampoo products discarded by the hospitality industry every day. Convention registrants are asked to help ACI reach its goal of putting together 750 hygiene kits that will go a long way to help young people in the area. Stop by Palazzo E (JW Marriott) Thursday between 10 a.m.-4 p.m. and Friday between 9 a.m.-2 p.m.

CLEANING FOR A REASON

We also have events planned to raise funds for one of ACI's other partners, Cleaning for a Reason (www.cleaningforareason.org). This organization helps provide free housecleaning to women who are undergoing treatment for cancer.

2ND ANNUAL QUACK FOR A REASON ACI CHARITY DUCK RACE

Back by popular demand on Wednesday, January 30, is the Quack for a Reason ACI Charity Duck Race. Cheer on your favorite duck at it races down the resort's Lazy River starting at 5:15 p.m.


Cleaning up: The charity duck race returns on Wednesday.

Go online now to buy your duck for $50: www.bit.ly/aci_duck. Many thanks to Shell Chemical LP for sponsoring the duck race to benefit Cleaning for a Reason.

GOLF TOURNAMENT

Please join us at the 4th Annual Charity Golf Tournament that takes place Friday afternoon. In 2012, the event raised over $10,000 for the Foundation!

The cost remains $200 per person and includes a golf shirt. Winners will be recognized at the Networking Finale Reception on Friday evening.

ECO-TOUR

We are excited to offer the 3rd Annual ACI Charity Eco-Tour. Enjoy a guided tour (via canoe or kayak) on Shingle Creek. The cost remains $100 per person.

SUPPLIER PROFILE

EVONIK LAUNCHES READILY BIODEGRADABLE "SUPER-WETTING" SILICONE SURFACTANT

In an important advance for consumer products cleaning chemistry, Evonik introduces a new organo-modified silicone surfactant that is both super-wetting and readily biodegradable. REWOCARE® BDS 15 is a non-ionic trisiloxane with "super-wetting" properties, ideal for hard-surface cleaners and rinse aids for automatic dishwash.

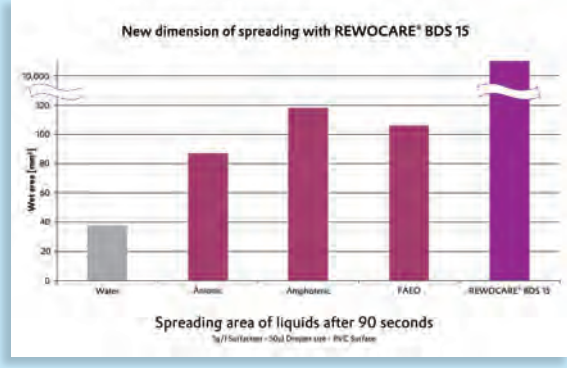
"Biodegradability is an important claim for makers of kitchen and bath cleaners, so this is a real advantage for formulators. No one expects silicone surfactants to be readily biodegradable," says Steve Turner, Business Linde Director, Household Care, for Evonik Goldschmidt (Hopewell, VA).

"Readily biodegradable" means greater than 60% biodegradability within 28 days (per OECD 301 F).

"Super-wetting" silicone surfactant for hard-surface cleaners

The new surfactant can significantly out-wet traditional surfactants. As a super-wetting liquid superconcentrate, it can rapidly spread emulsions even on hydrophobic surfaces at very low use levels.

In laboratory wetting measurements, just 0.05 percent REWOCARE BDS 15 in water reduced surface tension (on a PVC substrate) to 22.9 mN/m at 20oC. "Organic surfactants just cannot match this super-wetting performance," Turner says.



At a low concentration of 1 g/l on a PVC substrate, REWOCARE® BDS 15 silicone surfactant spreads a 50 microliter water droplet significantly wider than droplets wetted with fatty alcohol ethoxylates (FAEO) or other surfactants.

Silicone surfactants have been a workhorse active ingredient for a range of consumer and industrial cleaners for years because of superior wetting and high-performance in the final product. While some cleaning formulations have moved away from silicone surfactants due to biodegradability, REWOCARE® BDS 15 gives soap and detergent makers a cost-effective way to meet both environmental and performance goals.

REWOCARE® BDS 15 silicone surfactant is a super-wetting agent that can help deliver the fast-drying, streak-free performance demanded by automatic dishwashing products for dishware that shines.

The non-ionic REWOCARE® BDS 15 is soluble in water, alcohol or aromatics, and can be used alone or readily combined with other types of surfactants for use in a wide spectrum of cleaning products. For example, it can boost the performance of nonionic and amphoteric surfactants in kitchen, bath, glass and all-purpose-cleaners; and anionic surfactants in floor, plastic and glass cleaners.

"Because of its superior wetting performance at low concentrations, REWOCARE® BDS 15 gives formulators the option to use less active ingredients and achieve the same performance, or use of other types of surfactants to lower costs, while maintaining or enhancing cost-performance," Turner says.

For more information, contact Evonik Goldschmidt: 804 452 5608, info-household-care@evonik.com.

OUTLOOK: GRADUAL INDUSTRY IMPROVEMENT SEEN IN 2013

Global chemical industry conditions are forecast to improve this year but to remain below normal long-term growth rates as recessions in Europe and Japan as well as slower growth in China drag on demand. Chemical industry output excluding pharmaceuticals is expected to grow 3.4% in 2013 after a 1.1% advance in 2012, ACC says.

Chemical market trends have mirrored manufacturing activity, says Kevin Swift, chief economist with ACC. "Overall growth in the $5-trillion global business of chemistry stalled in 2012, with a recession in Europe and pronounced slowdown in China," Swift says.

Higher-growth emerging economies remain the demand growth driver in chemicals. Chemical volumes in emerging economies will increase 6.8% in 2013 and 7.6% in 2014, following a 4.9% advance in 2012, Swift says. In contrast, chemical volumes are estimated to have declined 1% in 2012 in developed nations and are forecast to gain 1.8% in 2013 before improving to a 3.1% gain in 2014.

Global economic growth has moderated, but should reaccelerate in the latter part of 2013, says IHS chief economist Nariman Behravesh. "After having slowed down from 4.2% in 2010 to 3% in 2011 and around 2.5% in 2012—with the eurozone and Japan going back into recession—the growth rate of the world economy will hold steady at 2.6% in 2013," Behravesh says. The outlook is predicated on the expectation that the massive monetary stimulus put in place in many key economies over the past year and a half will have some positive impact, and that uncertainty related to the US fiscal cliff and debt ceiling, the eurozone debt crisis, China's growth, and instability in the Mideast and Africa will become less intense—and that worries about many of these risks will diminish.

Swift: ACC forecasts 3.4% growth in chemical output in 2013.

Dow Chemical Chairman and CEO Andrew Liveris told investors in December that the company is "planning for a slow-growth world. We expect that 2013 will look a lot like 2012 in the aggregate." China's slowdown has weighed on industry demand and prospects. "We were used to double-digit growth in China for the past 10 years, but that has stopped or slowed in the past 6 months," Liveris says. Concerns over China's government leadership transition are starting to dissipate, and liquidity is starting to flow to small- and medium-sized enterprises in China—a positive indicator, Liveris says. Dow is expecting inventories in China to remain low and demand modest through the Chinese New Year. "We are not planning on a big bounce back in China," Liveris says. "Growth in China should be 6–7% [in 2013], which is way lower than normal." *(Continued on page 6)*

DETERGENT ALCOHOLS: GROWING CAPACITY WILL CONTINUE TO DRIVE DOWN OPERATING RATES

Production capacity for detergent alcohols has grown by leaps and bounds since 2007, far more quickly than demand, with the result that plant operating rates are very low. Given the great volume of capacity still in the pipeline, the situation will not improve anytime soon. In fact, it is likely to worsen, says Ralf Gubler, senior principal analyst at IHS Chemical.

Gubler has been analyzing the detergent alcohols market for the IHS Chemical Economics Handbook, which is issuing a new report on the market this month. He says that chronic underutilization has dogged detergent alcohols since the mid- to late 1990s, when a huge volume of capacity for producing "natural" alcohols from vegetable oils came onstream in Asia. Global annual production capacity totaled 2.0 million m.t. in 1998, but demand only reached 1.3 million m.t., putting average capacity utilization at just 66%.

Producers continued to install new capacity between 1999 and 2007. Synthetic, petrochemical-based production capacity received a significant boost when Shell Chemicals and Sasol Olefins & Surfactants brought large volumes onstream in 2001-02, and incremental additions of natural capacity continued in Asia. However, healthy demand globally and permanent capacity shutdowns in North America, Europe, and Japan limited net capacity growth to 400,000 m.t. at an average annual rate (AAR) of 2.6% in 1999-2007. Demand began to catch up, growing at an AAR of 3.7%—from 1.4 million m.t., to 1.9 million m.t., an increase of 500,000 m.t.

The global average operating rate rose. Just 66% in 1998, it climbed into the low 70% range between 1999 and 2003. The situation continued to improve from 2004 to 2007, and the rate averaged 80%.

However, conditions took a turn for the worse in 2008, and not only because of the global recession. Annual production capacity grew at an AAR of 6.5%, to 3.3 million m.t. in 2007-12, swamping demand, which grew at the comparatively meager AAR of 2.9%, to 2.2 million m.t. The global average operating rate slipped to 74% in 2008, and since 2009 it has languished between 66% and 69%.

Major producers of detergent alcohols

Global position	Company	Nameplate capacity (m.t.)	Share of global total (%)
1	Shell	470,000	14.2
2	Sasol	446,000	13.4
3	BASF	371,000	11.2
4	Kao	210,000	6.3
5	Liaoyang Huaxing	198,000	6.0
6	Ecogreen Oleochemicals	152,000	4.6
7	Procter & Gamble	136,000	4.1
8	Kuala Lumpur Kepong	135,000	4.1
9	Bakrie Sumatera	119,000	3.6
10	Zhejiang Jiahua	117,000	3.5
	Other 23 producers	965,000	29.1
	Total	3,320,000	100

Source: IHS Chemical

The latest surge in new capacity has taken place almost entirely in Asia, home to the most significant growth markets for detergent alcohols. Between 2007 and 2012, 383,000 m.t./year of production capacity was installed in Southeast Asia, 360,000 m.t./year in China, and 74,000 m.t./year in South Asia, says Gubler. Demand growth was negative in the advanced economies during this period, falling at an AAR of 0.3% in North America, 3.0% in Western Europe, and 4.3% in Japan. However, in Southeast Asia and China, demand grew at an AAR of 14.4% and 11.2%, respectively.

The new capacity is also largely based on natural feedstocks. "In 1998, producers of detergent alcohols from oils and fats accounted for 54% of the installed capacity," Gubler says. "By 2012, their share had surpassed 71%, and [it] is expected to increase to 79% by 2017." Meanwhile, synthetic capacity declined as companies such as the former EniChem, ICI, and Hoechst, as well as Mitsubishi Chemical and Oleon (Ertvelde, Belgium) left the market. The number of major synthetic producers has consequently fallen to four; the number of producers making natural alcohols has swelled to 42.

Natural-alcohol producers have proliferated in Asia because the region is home to a multitude of plantations ready to supply the palm oil and palm kernel oil feedstocks required. The number and size of these plantations has increased dramatically over the last decade, spurred by demand from the swelling biodiesel market. "It is important to recognize that the business driver for these new capacities is not the economics of the alcohol business, but the economics of the plantation business, which is in turn driven to a substantial extent by the subsidized biofuels business," Gubler says.

The growing supply base is a mixed blessing for natural-alcohol producers. Their product became advantaged when rising oil prices showed up in the price of synthetic alcohols, but the advantage faded as high demand for biodiesel gave the "green" fuel increasing leverage in the competition for vegetable oil feedstocks, Gubler says. "Because an increasing portion of these natural oils is used in the production of biodiesel, the prices of the oils have become more and more tightly linked to crude oil prices in the last few years," he says. "As a result of this development, the price advantage that producers of natural detergent alcohols benefited from for many years was reduced substantially. Thus, alcohols based on synthetic raw material sources are far from disappearing from the marketplace."

Gubler expects industry profitability to remain poor in the years ahead. "For the future, operating rates are [expected] to get further depressed, as capacity buildup is forecasted to continue to beat growth in consumption," he says. Gubler projects that overall capacity utilization will decline to 62% through 2017, and that another round of industry consolidation will be necessary.

Global demand growth for detergent alcohols, typically slightly below average GDP growth, will be about 3.2% annually in 2012-17, Gubler says. Consumption will continue shifting to Southeast Asia, in line with expectations for regional growth, he adds. Latin America, Eastern Europe, Africa, and South Asia will also take a growing share of global supply.

Demand growth in China, however, will likely be constrained by the limited availability of cheap detergent alcohols and ethylene oxide. "As a result, it is expected that some of the downstream industry will move away from China to Southeast Asia, driven by aggressive growth ambitions of local producers to move or expand their activities into alcohols conversion and spurred by the reduction of export taxes on refined palm oil in Indonesia," says Gubler.

Mature markets will, meanwhile, account for a declining share of global demand. Gubler projects demand in North America during 2012-17 will grow at an AAR of 2.2%; in Western Europe at 2.1%; and in Japan at 1.1%. —CLAY BOSWELL

Outlook: Gradual improvement seen in 2013

(Continued from p 4)

Each 1% drop in Chinese chemical demand shaves 0.25% off of global chemical growth, Swift says.

The United States should be one of the strongest performers among developed economies, with prospects aided by surging supplies of low-cost natural gas. US chemical output excluding pharmaceuticals is expected to improve modestly in 2013 with a 1.9% advance, up from a 1.5% gain in 2012, according to ACC. The softening of the manufacturing recovery has dampened US chemical demand and recession in Europe and weakness in China have hindered exports, Swift says.

"Growth is expected in plastic resins as export markets revive," Swift says. "Production of specialty chemicals will be driven by demand from end-use markets—most notably light vehicles and housing." In the long term, US chemicals growth is expected to expand at a pace exceeding that of the overall US economy aided by an improved US feedstock cost position thanks to expansion of natural gas supplies, Swift says. "Following a decade of high and volatile natural gas prices that destroyed industrial demand and led to the closure of many gas-intensive manufacturers, shale gas offers a new era of American competitiveness that will lead to greater investment, industry growth, and employment," Swift says.

US chemical exports will grow 4.7%, to $199.7 billion, in 2013, before advancing 6.6%, to $212.8 billion, in 2014. Imports are expected to grow by 4.1%, to $197.3 billion, in 2013, before growing by 6.2%, to $209.6 billion, in 2014. "Trade deficits will continue in pharmaceuticals and agricultural chemicals but will be offset by large, and growing, surpluses in basic and specialty chemicals," Swift says.

Strong gains in capital spending by American producers are expected during the next several years, the result of investment in petrochemicals and derivatives arising from shale gas developments. Capital expenditure growth of 14% is expected in 2013, to $43 billion, after a gain of 19.8% in 2012. "Double-digit gains in capital spending are expected through 2015 with only a minor slowdown in growth after that," Swift says. "By 2017, US capital spending by the chemical industry will reach $64.5 billion—more than double that of 2007."

Following a decade of job losses in the chemical industry, the industry gained jobs for the second year in a row in 2012. Total employment in the business of chemistry will average 798,500 in 2012—up 1.3% from 2011. In 2013, productivity gains, which typically average around 2.5%/year, are expected to outpace output growth. Chemical employment is forecast to slip by 0.2% in 2013 before expanding by 0.8% in 2014, Swift says.

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