



# JANUARY 2015 NEWSLETTER

THE NATIONS LEADER IN ESTIMATING SOFTWARE

## In Bermuda, OSE Pro Is Used To Go One Step Beyond

Click to see our Award Winning Software:

Electrical

Plumbing & Mechanical

Transmission and Distribution

Automated Building Systems (ABS)



Forward to a Friend

Bermuda Energy Services Co Ltd. (BESCO) does its work on a 22-square-mile island in the Atlantic Ocean. Roughly 65,000 citizens live in the British possession – although that number regularly expands thanks to numerous vacationers and visitors.

Obviously, BESCO has a limited service area. The company has grown by providing an increasing breadth of services – including a sharper focus on electrical contracting, thanks to a 2009 acquisition.

Along about that time, BESCO hired Todd Bears to help it handle increased amounts of electrical construction. Bears, a U.S. citizen, then had 28 years of industry experience. Trained as an electrician by the IBEW in the Washington DC area, he had, over time, “worked in 28 different jurisdictions” in the U.S.

Today, a combination of BESCO’s electrical ambitions, the needs of customers in Bermuda, and Bears’ industry knowledge has helped the company to grow to a point that it regularly employs roughly 30 people in its electrical operation.

And, for the past six years, estimating systems from McCormick have helped the company grow and thrive.

### Estimating for a full-service company

“We will do anything,” Bears said of BESCO. See the company website for the full range of services provided (beyond electrical). In the electrical contracting area, the company does construction, has a service department, handles fire alarm work, and has worked in data centers and the local hospital. Hotels, a major area for construction in Bermuda, are also a focus.

- **Key Magazine Article**  
[Do you understand your overhead – and how to recover these costs? – by Dick Manrod of McCormick Systems.](#)
- **Computers & Construction**  
[About 'Free Use Pay & Print' \("free UPP"\)](#)  
[Automation makes us dumb \(Cadalyst\)](#)  
[Digital issue of Q4/14 AEC Bytes \(FREE\)](#)  
['Gift ideas' for construction gearheads](#)  
[Impact of mobile in construction](#)
- **Construction/Economic Readings**  
[Architect's index up for 7 straight months](#)  
[Dodge Momentum Index \(nonres\) up in December](#)  
[EC magazine's '15 construction outlook](#)  
[Nonres construction hiring surges](#)  
['Normal' drop in November construction](#)

starts'

**Online Articles of Note**

[AFCLs & residential safety](#) (see p10)

[Electrical connections: Proper torque](#)

[13 Lighting trends to watch in 2015](#)

[Using technology to strengthen relationships](#)

[Wireless lighting control retrofits](#)

**Training Dates**



See all Education offerings – updated frequently – at the [online Education page](#).

**STANDARD CLASSES**

Feb. 4-6 (Arizona)

March 4-6 (Arizona)

April 27-28 (Conference)

June 3-5 (Arizona)

July 8-10 (Maryland)

**ADVANCED CLASSES**

Feb. 19-20 (Arizona)

March 26-27 (Maryland)

April 27-28 (Conference)

**ESTIMATING BY HAND CLASSES**

May 14-15 (Maryland)

June 18-19 (Arizona)

Nov. 19-20 (Arizona)

Training can be "suitcased" to your facility. We will tailor our training to your needs. Ask us about

"Although Bermuda is British, we go by the National Electrical Code here," Bears explained. So on that NEC end, there wasn't a lot new for Bears when he got to the company.

However, Bermuda is an island. Everything electrical comes in via an ocean-going vessel. This makes the task of estimating just a little bit more interesting than for those contractors and estimators working in the U.S.

"For some jobs, as in those for government facilities and other 'exempt' customers, we have to add duty-free ocean freight to the cost of materials. That's a 23% surcharge. For other customers – as in private industry – we have to add fully dutied loaded freight costs . . . that takes us to 142% on equipment costs!"

Bears has created what he calls "a very customized" BESCO database in the company's McCormick Systems software. While the ocean freight is part of it, so is the fact that the company does a little bit of everything.

"We can't use standard bid labor here," Bears noted. "Everything here is just a little bit different from what you might expect in the U.S."

The screenshot shows the BESCO software interface. On the left, there is a table with columns 'No.' and 'ItemName'. The items listed include 'Electrical Database', 'copper wire', 'cu thhn solid', '14 THHN CU SOLID', '12 THHN CU SOLID', '10 THHN CU SOLID', 'cu thhn stranded', '14 THHN CU STRANDED', '12 THHN CU STRANDED', '10 THHN CU STRANDED', '8 THHN CU STRANDED', '6 THHN CU STRANDED', '4 THHN CU STRANDED', '3 THHN CU STRANDED', '2 THHN CU STRANDED', '1 THHN CU STRANDED', '1/0 THHN CU STRANDED', '2/0 THHN CU STRANDED', '3/0 THHN CU STRANDED', '4/0 THHN CU STRANDED', '250 THHN CU STRANDED', '300 THHN CU STRANDED', '350 THHN CU STRANDED', '400 THHN CU STRANDED', and '500 THHN CU STRANDED'. On the right, a detailed view of the 'Electrical Database' item is shown, including fields for Item # (1), Item Name (Electrical Database), Manufacturer (Master Electrical), Catalog Number (cpu 14-30), DCI Code, Last Update (08/19/2003 07:09:09 AM), Header (Yes), Count/Length Input (None), Besco Cost Code (Branch Devices), BOOK PRICE (\$0.00), First Cost (\$0.00), Dutied Landed Cost (\$0.00), D/F Landed Cost (\$0.00), BID LABOUR (0.00), Besco Bid Lbr (0.00), Besco Service Lbr (0.00), Besco Industrial Lbr (0.00), Besco CO 1 (0.00), Besco CO 2 (0.00), Besco CO 3 (0.00), Besco Service CO 1 (0.00), Besco Service CO 2 (0.00), Besco Industrial CO 1 (0.00), Besco Industrial CO 2 (0.00), Burdened Lbr Rate (\$41.00), NECA 1 (0.00), NECA 2 (0.00), and NECA 3 (0.00).

**From spreadsheets . . .**

When Bears got to the island, the company's electrical operation was in a state of flux. It had just been expanded via the acquisition of an electrical contractor. However, jobs were estimated using paper and spreadsheets.

Was this out-of-the-ordinary? As of 2009, Bears – coming in from 28 years of work in the field – wasn't sure. But, as it turned out, a McCormick program was lying around, mostly unused. He embraced it: "I'm a self-taught estimator, but it seemed smart to get the estimating software up and running. In December 2009, I took the Standard training class, which helped me learn the basics. It helped me, and the company, a great deal."

Over nearly six years in Bermuda, Bears guesses that he has estimated as many as 400 jobs. The variety might make your head spin: From a recent hotel project (5 buildings on a single site) to setting diesel fuel tanks, to a new steam turbine install at Tynes Bay Waste-to-Energy plant – to a newly completed hospital project, which required numerous change orders.

"I've seen the other, competing systems out there," Bears noted. "They don't seem to have anywhere near the versatility that McCormick offers us. And we need the ability to easily make the system and the database do what we need it to do."

**. . . to sophisticated use of OSE Pro**

BESCO funded Bears' visit to the 2014 McCormick Systems User's Conference – and it turned out

customized training at your site!

Call to register for any of the above classes, including those in Maryland: 1-800-444-4890.

Click here for the complete list of upcoming **2015 training dates**

We've posted training dates, directions to our training facilities, and registration forms on our Web page. Click the "Education" button on our home page, or [click here](#).



### Microsoft Windows has discontinued support of Windows XP and Windows Vista.

All new program technology assumes it is not running on these operating systems.

**Our next Version V11.7, will not support Windows XP or Vista or Server 2003.**

- [Visit the McCormick Website](#)
- [Unsubscribe](#)

to be an investment with a spectacular return. At the event, the software company introduced its new On Screen Estimating Pro product.

OSE Pro offers numerous advantages to McCormick Systems users; see more about that here. For BESCO and Bears, there's actually more. He described one recent use to which he put OSE Pro.

BESCO was to perform the electrical and mechanical engineering on that 5-building hotel development. Using the layers in OSE Pro, Bears was able to help the engineers with the exact location needed for occupancy sensors, pull stations, and other equipment.

"I ended up moving some of the equipment, including the smoke alarms, by focusing on the coverage areas for each unit. It was actually rather easy in OSE Pro."

"I created a standard box for the coverage area of a smoke alarm, for example," Bears said. "Then I moved the boxes around so we had complete coverage. Shortly thereafter, I turned off the layer with those Xs . . . and overlaid it on the lighting design, to find conflicts."

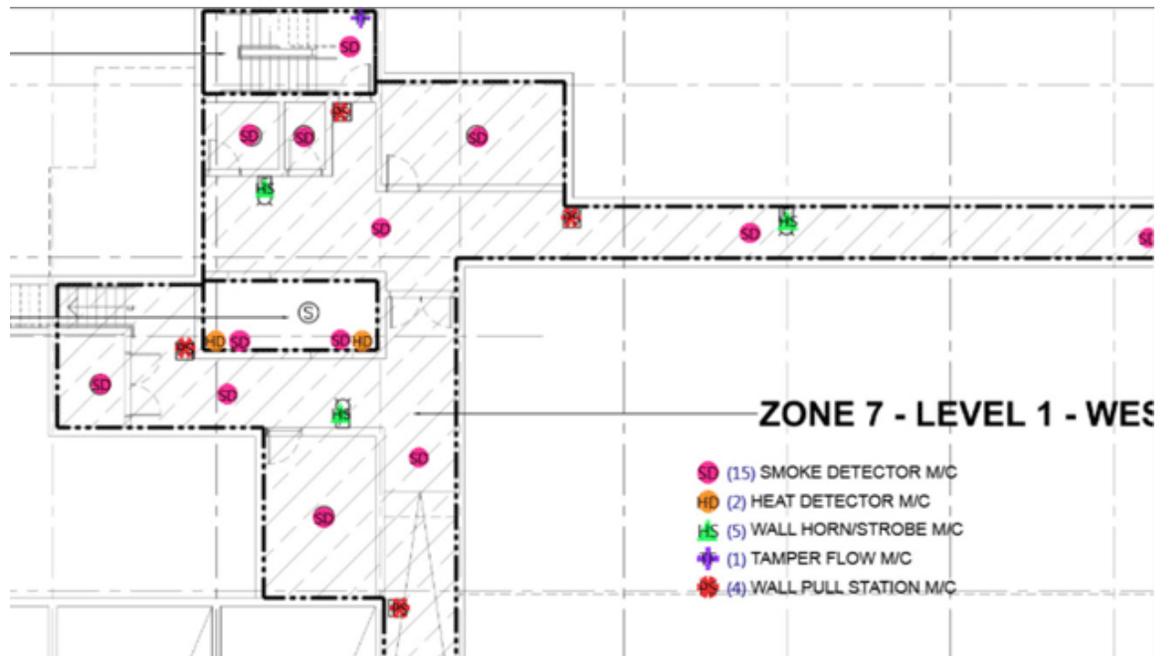
"I also interfaced with the HVAC layer. The purpose, of course, was to make sure we were not putting a smoke detector in the middle of a fixture, or too close to an HVAC component."

Listening to the engineers was important in the process – and the effort all took place before a CAD drawing was finalized. One example: "I put pull stations in per the requirements – you've got to have a pull station where you have an exit door," Bears remembered.

"But I put one in a location where – the engineer came back and told me – there was a door that was not a fire exit. It was very simple to just delete that using OSE Pro."

OSE Pro output was then handed off to a CAD operator. But no one was looking over each other's shoulder: The CAD person is located in Canada.

Of course, the OSE Pro interface with McCormick was seamless, and the work Bears (and the engineers) had done also resulted in an estimate. But the additional help provided here in finalizing the design is . . . not necessarily a standard McCormick promotion of its product!



### Applying change orders

For hospital project, the general contractor dictated use of a format in documenting change orders. As the project developed, the format had to be used more than 350 times for change orders requested on this job.

Move backwards to spreadsheets? Bears wouldn't hear of it. He used McCormick to estimate the changes and then "we took the results from McCormick and put them into the spreadsheets. The multipliers are there to apply overhead and profit, which reports into the format the customer sees when printed to PDF.

"Every change order for the job was done this way, it worked really well and all our pricing still came directly from McCormick."

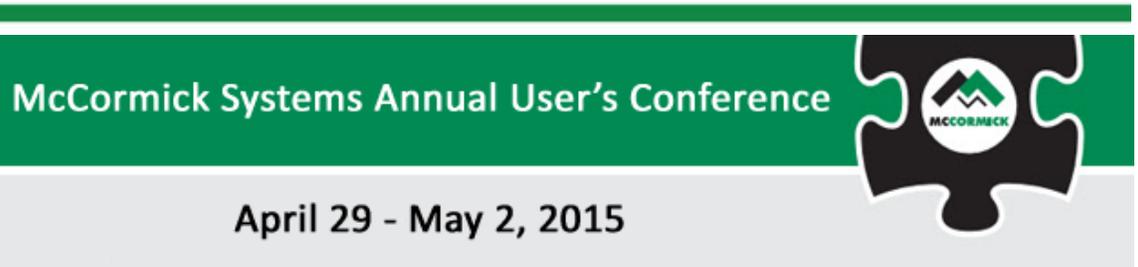
### The truths of estimating

Bears sent along screen shots of BESCO's old database and the new version, which is the result

(he said) of his learning more about the program in the Advanced Class he took from McCormick. Additionally, there was an interesting tag line below Bears' sig file.

"The same work under the same conditions will be estimated differently by ten different estimators,

or differently by one estimator at ten different times."



*April 29 – May 2*

## **Put The Pieces All Together at The User's Conference**

To be held at the Tempe (AZ) Mission Palms, the 33rd annual McCormick Systems User's Conference – April 29-May 2 – will provide you with all of the information you need NOW on the estimating system sitting on your desk:

- Details on system "secrets" and shortcuts that you might have missed;
- New enhancements that will help you streamline your estimating;
- What you can add to boost performance (elements such as OSE Pro and CAD Estimating);
- Interactive format (you talk, we listen); and
- Lots more!

It would take 13 pages to provide you with all the details on this event. We know that because we've prepared [a 13p PDF, downloadable here](#).

**NOTE: Act now and beat the Jan. 31 deadline for a discount!**



**We Come To You, You Come To Us  
-- Where To Find McCormick in '15**



Of course, you can always find us in our hometown of Chandler AZ. We have regular training classes – Standard, Advanced, Estimating-By-Hand, and Plumbing & Mechanical. [See the Education page of our website](#) for the latest info on training course offerings and dates – in Chandler and in Maryland as well!

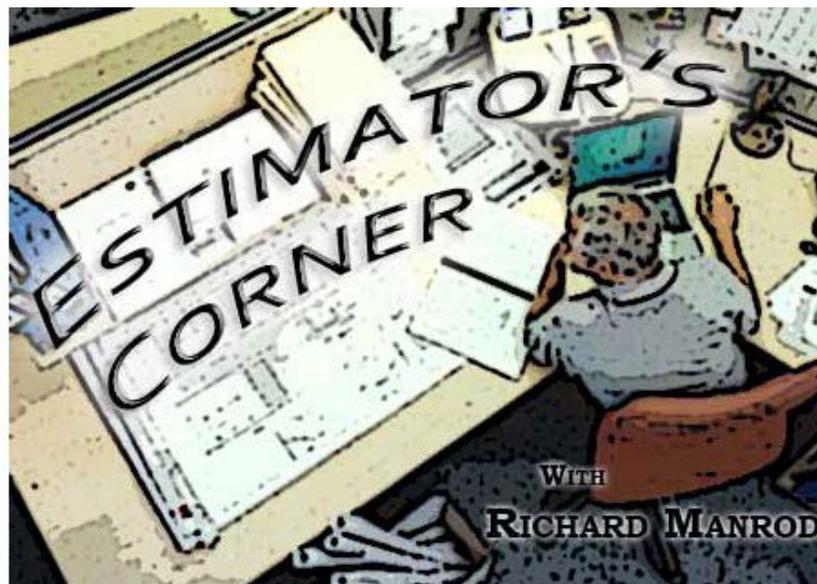
However, as of November 2014, we anticipate exhibiting at five industry trade shows. Here are the cities, dates, and show titles in our plans:

- Orlando FL Feb. 22-26 – [BICSI Winter Conference](#)
- Maui, Hawaii, March 8-12 – [MCAA annual convention](#).
- Las Vegas NV, Sept. 20-24 – [BICSI Fall Conference](#)
- San Francisco, Oct. 4-6 – [for the NECA Show](#).
- Tampa FL, Oct. 21-24 – [for the IECI Electric Expo](#)

ALSO NOT TO BE MISSED – the annual User's Conference, to be held April 29 to May 2 in Tempe AZ. Look for more information, coming soon! Want an early start? [Here's the registration form](#).

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### Estimator's Corner



Obtaining the Plans and Specifications:

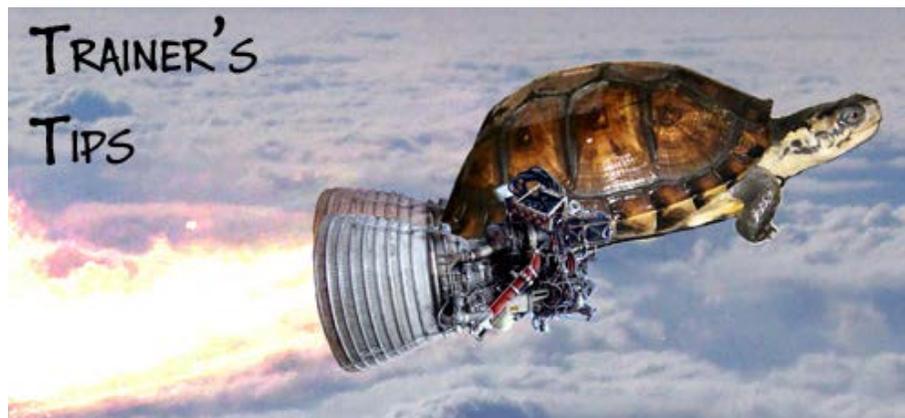
- After deciding to do the Estimate, how do we get the Plans and Specifications? Are they readily available?
- If they are paper plans and specifications, can we obtain at least one copy for our use? Is there a plan deposit (and is it refundable)?
- All copies of paper plans and specifications should be checked in. Note the number of copies of the plans and specifications, bid due date, plan deposit amount if refundable (or this would be a good time to add a non-refundable deposit to the Bid Summary). Note any addendums, including the addenda number and date. Note also the contacts (architect, engineer, owner, general contractor, etc.).



This should be done on a sheet, chart or file that is available to all involved.

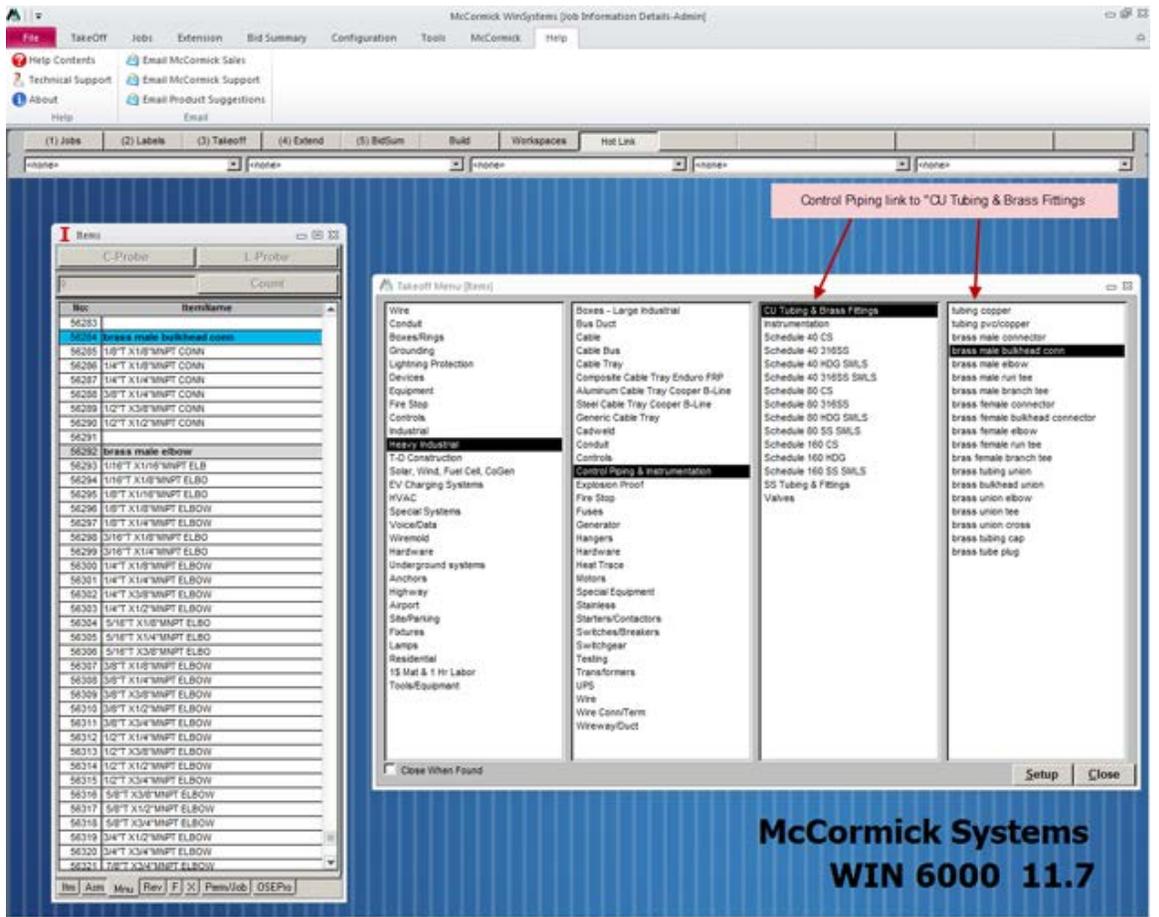
- Distribute the plans and specifications to estimators involved, keeping a list of who has which plans and specifications, etc. and when their part is due.
- Of course, everything listed above regarding paper plans and specifications also applies to digital plans.
- If plans and specifications are in a digital format, do we have the capability to either print them or read the digital format?
- If the digital plans are available and in the AutoCAD format and you have AutoCAD (not AutoCAD Lite), they can be taken off easily using McCormick's award-winning CAD Estimating program.
- If the digital plans are not available in the AutoCAD format (.dwg, .dxf, etc.) but are available in .BMP, .jpg, .gif, .tiff, .tif, .fax, .dib, .rle, .pcx, .dcx, .jpeg2000, .png, .wmf, .emf, and .pdf format, the McCormick's OSE program will make the takeoff a snap.
- If plans and specifications are in a digital format, archive a copy of the files and only delete those files if there isn't a chance that you will need them again.

If you have any questions about the things in these areas - Please feel free to give us a call - 800-444-4890

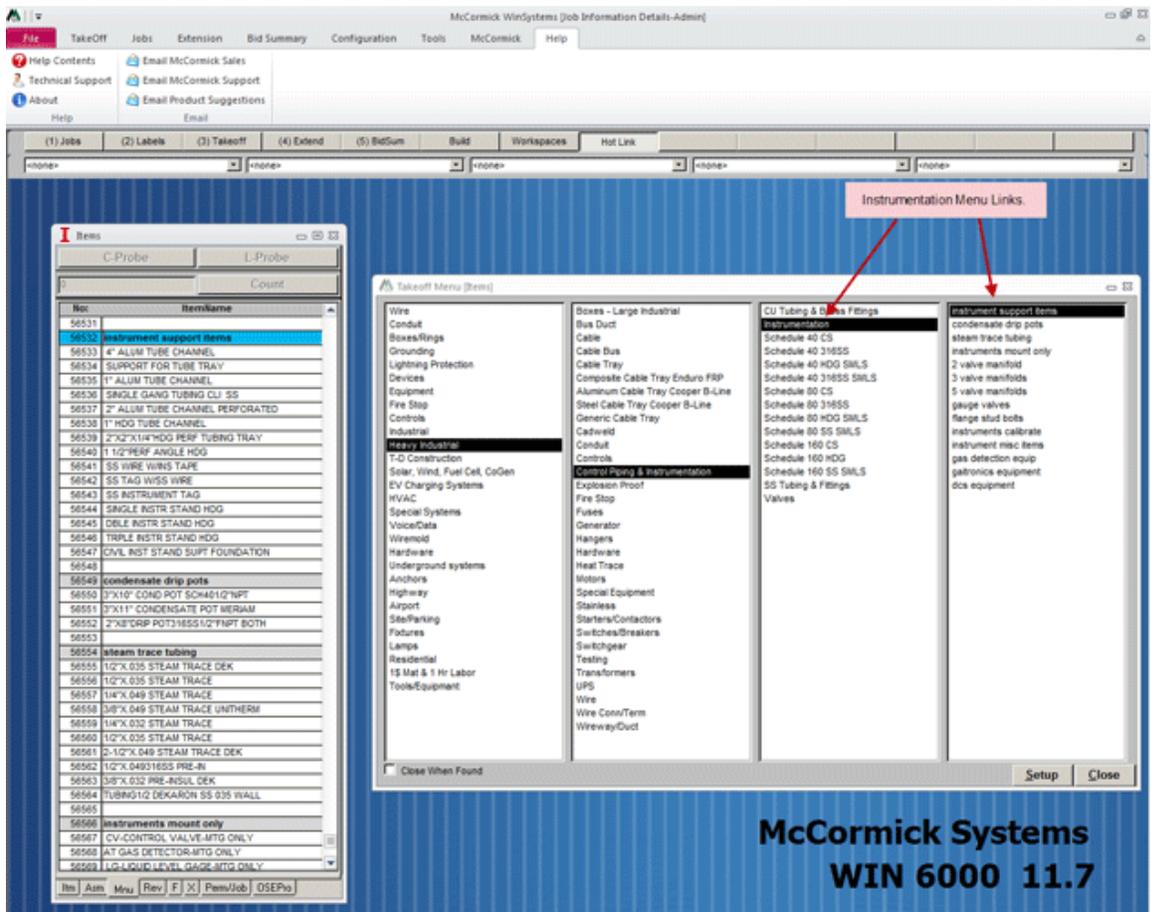


**More On The McCormick Systems Database**





Shown below is the Link to "Instrumentation."



Shown below is the Link to "Stainless Steel Tubing and Fittings".

The screenshot displays the McCormick WinSystems software interface. On the left, a list of items is shown with columns for 'No.', 'Itemname', and 'Count'. The first item is '56200 stainless steel (ss) tubing'. On the right, a 'Takeoff Menu (Items)' window is open, showing a hierarchical list of categories such as 'Wire', 'Boxes - Large Industrial', 'CU Tubing & Brass Fittings', and 'Stainless steel (ss) tubing'. A red box highlights the 'Stainless Steel Tubing & Fittings' category, with red arrows pointing to it from a label above. The software title bar indicates 'McCormick WinSystems [Job Information Details-Admin]'. At the bottom right, the text 'McCormick Systems WIN 6000 11.7' is visible.

## Estimating Plumbing & Mechanical Systems



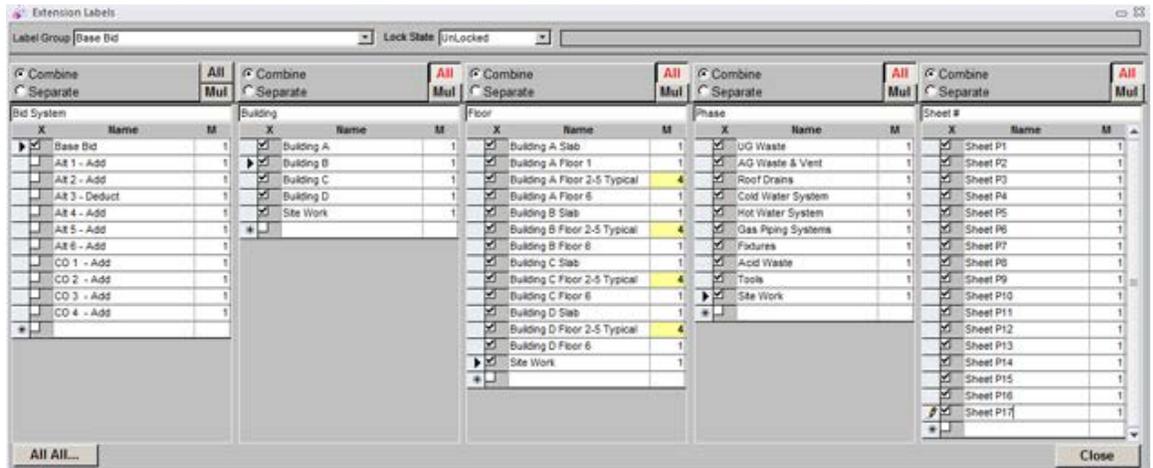
### Using Labels to Break Down the Job:

Note: Some Estimating Systems may have fewer Label columns than the five shown below.

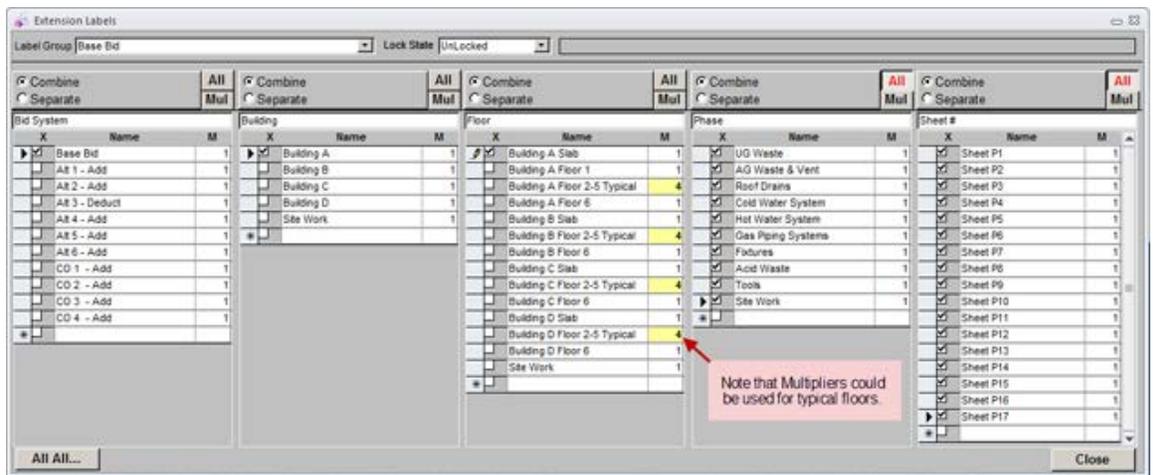
Shown below is an example of labels for a Base Bid with Alternates, four Buildings and Site work, the buildings are broken down by Floors, Phases or Systems, and Plan Sheets.

The advantage to breaking a job into logical sections allows more accurate material deliveries and a way to track the labor used against the labor estimated as the job progresses.

The Boxes would be checked as shown below for the Base Bid at the bidding stage. The only changes needed to Bid the Alternates and Change Orders would be to un-check the Base Bid and check the appropriate Alternate or Change Order.



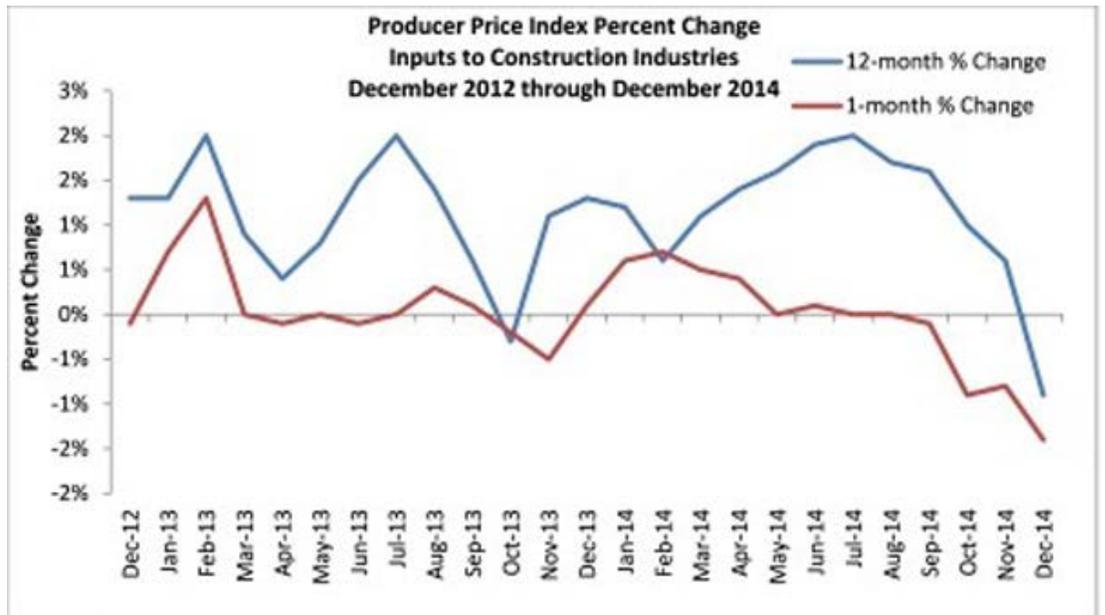
If you wanted to check on the material and labor estimated for the “Base Bid”, “Building A Slab,” you would check the boxes shown below and extend. This would only give you the takeoff for the “Building A Slab”



# perspective

## Construction Materials Prices Down In December

[From an online ABC report:](#)



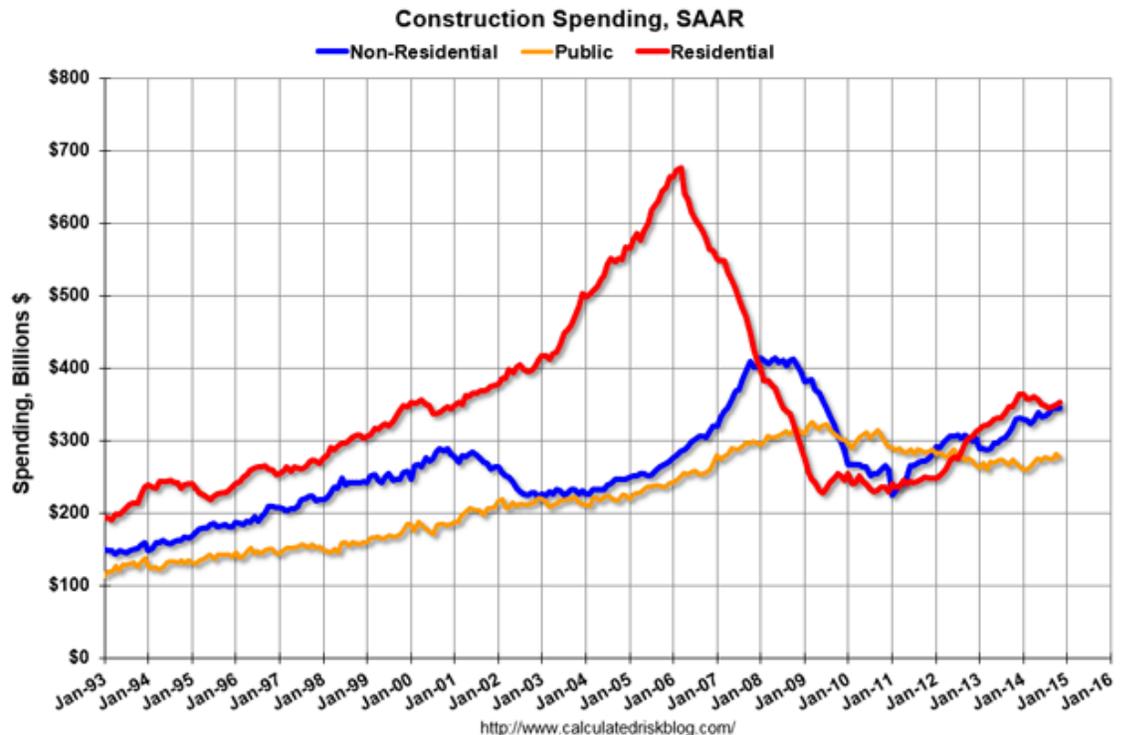
Source: Bureau of Labor Statistics

“Without question, financial markets have been unnerved by the recent declines in oil, copper and other commodity prices, although that jitteriness does not necessarily imply a serious economic problem in America,” said Associated Builders and Contractors Chief Economist Anirban Basu.

“The fact is the U.S. economy has performed handsomely over the past nine months according to most metrics and conventional wisdom suggests that it can continue to expand at or above trend rates of growth despite economic weakening in Europe, China and elsewhere. This is further evidenced by the World Bank’s recent downgrade of its forecasts for global growth in 2015 and 2016, while it upgraded its outlook for the United States.

## Construction Spending Dropped 0.3% in November

From the [Calculated Risk Blog's report](#) (note: SAAR = seasonally adjusted annual rate):



Note: Non-residential for offices and hotels is increasing, but spending for oil and gas is generally declining (up slightly in November from October). Early in the recovery, there was a

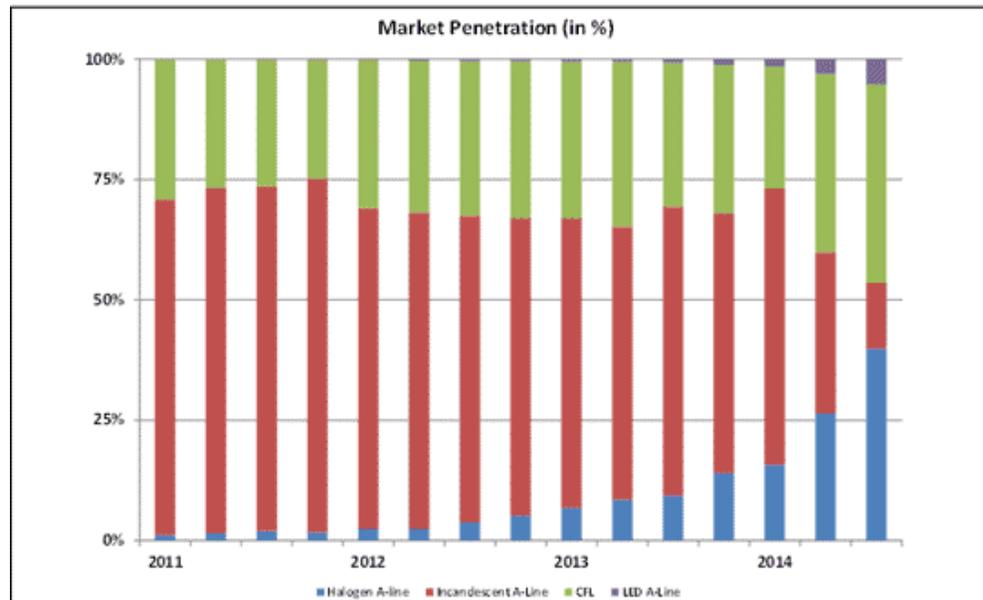
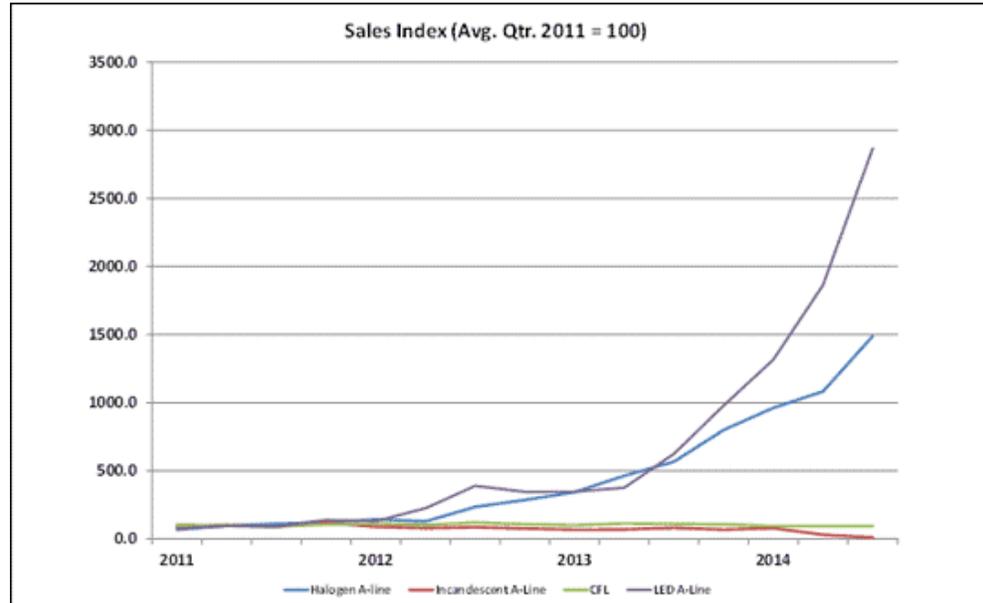
surge in non-residential spending for oil and gas (because prices increased), but now, with falling prices, oil and gas is a drag on overall construction spending.

As an example, construction spending for lodging is up 11% year-over-year, whereas spending for power (includes oil and gas) construction peaked in mid-2014.

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## Decline In CFL Shipments

[From NEMA's quarterly report:](#)

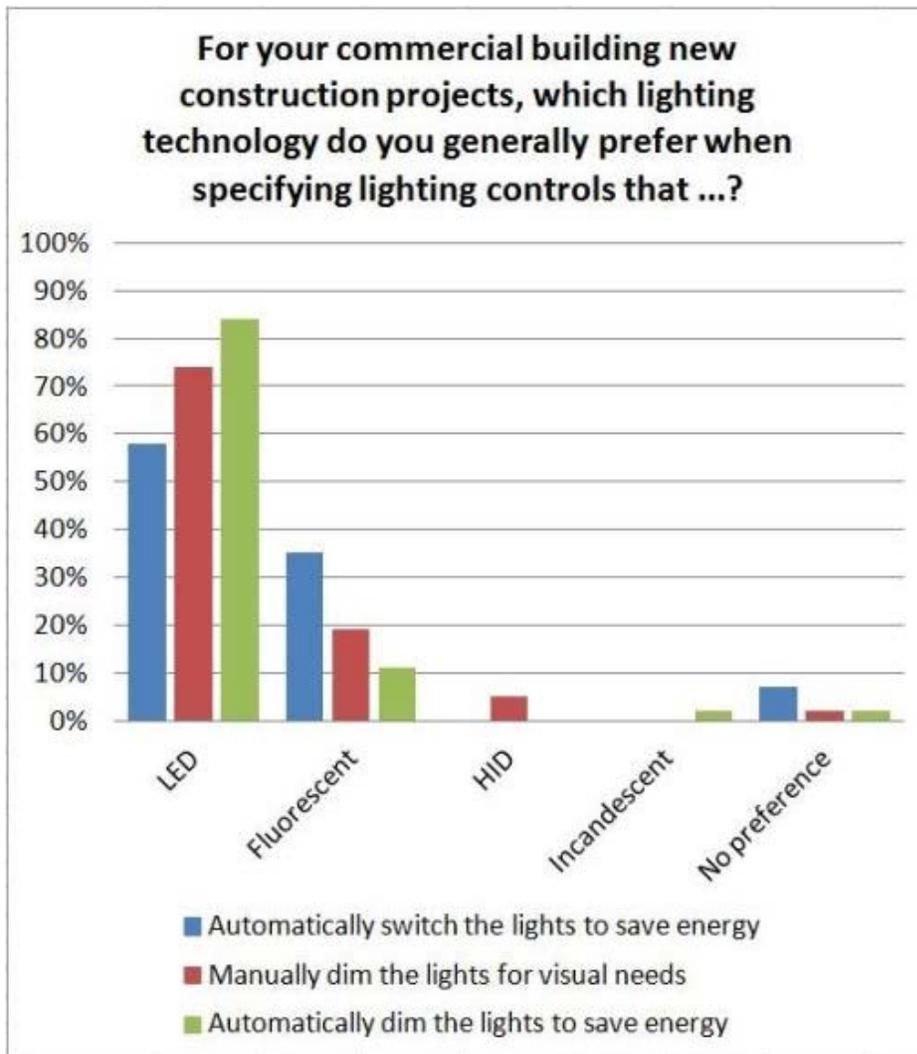


NEMA's index for compact fluorescent lamp (CFL) shipments registered a year-over-year decline of 14.5 percent in the third quarter of 2014 despite a modest quarterly increase of 1.5 percent. For the first three quarters of 2014, the CFL index decreased 13.1 percent compared to the same period last year.

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## Survey Finds Confidence In LED Lighting + Controls

[From the Lighting Controls Association:](#)



*the average electrical contractor respondent reported that in roughly 45 percent of the commercial building projects they completed over the previous year, the lighting control system was commissioned—that is, proper installation was verified and performance tested prior to delivery to the owner.*

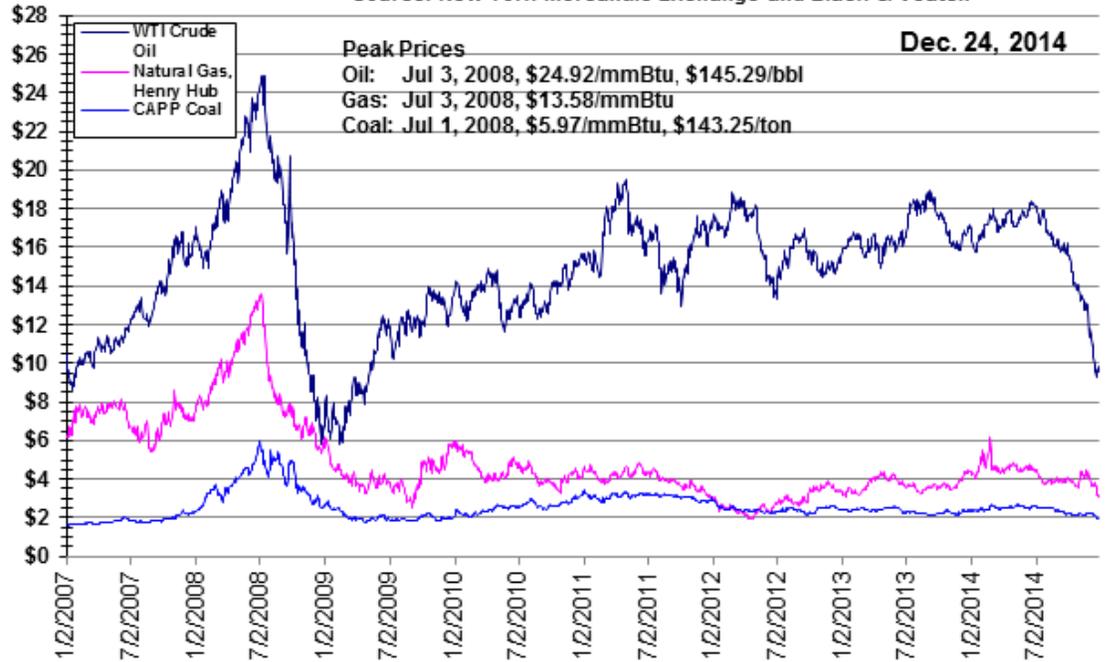
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## **Energy Price Slide: It's Infecting Coal, Too**

[From Black & Veatch's newsletter:](#)

## Crude Oil, Natural Gas, Coal Spot Month Futures Prices Dollars per Million Btus

Source: New York Mercantile Exchange and Black & Veatch



Black & Veatch doesn't anticipate much change in natural gas prices for a while, although the market will be largely driven by demand rather than supply. Once the U.S. liquefied natural gas export projects come on line and the effects of the Environmental Protection Agency's Clean Power Plan are fully understood, they will be reflected in market pricing, which might even strengthen, he said.

The pipeline bottlenecks to New England aren't going away, so price spikes will likely appear again on colder days this winter, Abt said. The region probably faces at least two more seasons of price uncertainty since Spectra Energy's Algonquin Incremental Market (AIM) Project – designed to help relieve congestion – is not expected to be fully operational until late 2016.

As 2015 begins, about 40 U.S. pipeline projects are in various stages of development for receiving natural gas from the Marcellus and Utica shales. All together, the projects represent more than 33 billion cubic feet (Bcf) per day of capacity and about \$20 billion of investment, if all are ultimately built. The proposed in-service dates go out to 2018.