

Nuclear's REAL Future

Special Report

Nuclear Use to Rise Despite Japan, Uranium Crunch Looms

Don't believe everything you hear.

Nuclear energy is only a contentious issue among people who are powerless to do anything about it.

Those in control are plowing ahead full tilt.

Take the latest news from the Tennessee Valley Authority (NYSE: TVC), that government-owned publicly-traded skeleton in free market capitalism's closet...

Like its Uncle Sam, the TVA is in financial trouble. It has a government-set debt limit of \$30 billion. And it has \$24 billion in debt. Sound familiar?

But fiscal ineptitude isn't the point; making money from nuclear energy *is*.

You see, the TVA wants to build more nuclear plants. It already operates six of them. A new one at Watts Bar will be operational in 2013.

But the nation's largest utility is hungry for more — even before that plant is complete.

Nuclear Junkie

This week the TVA said it would — for the first time ever — lease that plant when finished.

This does two things:

1. It keeps the cost of Watts Bar from being added to the debt, which would put it over the \$30 billion limit.
2. It generates funds from the lease.

And I'll give you one guess what those funds will be used for...

That's right! The board of the TVA last week approved a \$4.9 billion plan to build *another* nuclear plant. Called Bellefonte 1, it's expected to be complete in 2020.

President and CEO Tom Kilgore even penned an Op-Ed in the *New York Times* to explain why nuclear is so critical. It's important I share a piece of that with you today:

The reason for the commitment is simple: for all the recent news, nuclear is still our best choice for producing large amounts of round-the-clock, reliable electricity that is affordable, safe and clean.

We believe that nuclear power, developed properly, is not only a promising option, but the best available. Our forecasts for the region's energy demands by the end of the decade show we will need more base-load electricity — or continuous minimum power — something nuclear plants excel at providing.

Nevertheless, critics have rightly asked, why not simply bypass nuclear power and rely on more wind, solar, gas and energy efficiency? In fact, the T.V.A. is adding power from all of those sources in record amounts. But none can produce sufficiently large volumes of base-load electricity as consistently and affordably as nuclear power can.

No energy source is perfect. But the risks associated with nuclear power are well understood and — with the proper emphasis on safety — they are entirely manageable. Fukushima taught us that we must be prepared for what was once considered almost unimaginable, and we are incorporating the lessons of that disaster into our everyday operations.

At the Tennessee Valley Authority, our strategy for meeting the electricity challenges of the future is a balanced portfolio of energy production that relies somewhat less on coal, and more on energy efficiency, gas, renewable and nuclear power. If cost, reliability and cleaner air are important, nuclear energy must be part of the mix.

Must Be a Part of the Mix

Of course, the entire world is still gasping from Japan.

Germany even said it's going to end its nuclear program, eventually shuttering all 17 reactors. Eight have already been shutdown; the rest are expected to close sometime before 2022. Because even though they want them closed, Germans are still reliant on that power, and they can't simply abandon it overnight.

And at the end of the day, Germany is only home to 5% of global nuclear capacity. By the time they shutdown their last plant, the construction of reactors elsewhere will more than offset the loss.

As Cameco (NYSE: CCJ), the largest uranium supplier in the world, said in its quarterly report this week:

Other countries around the world have now had time to do a preliminary review of their nuclear programs. With very few exceptions, we see these countries continuing their commitment to nuclear energy. India, China, France, Russia, South Korea, the United Kingdom, Canada, the United States, and almost every other country with a nuclear program are maintaining nuclear as a part of their energy mix.

Other previously non-nuclear countries are considering adding nuclear to their energy programs in the future. Saudi Arabia, for example, recently announced its plan to build 16 reactors by 2030. Its plan includes building the first two reactors over the next 10 years and adding two new reactors every year thereafter.

You can draw your own conclusions about what that last nugget insinuates about the Saudi's confidence in their oil future...

In a speech this week entitled "Future of Nuclear Power After Fukushima," former Atomic Energy Commission chairman M.R. Srinivasan said India plans to boost its nuclear capacity by 50,000 to 60,000 MW in the next 20 years. That's at least 50 new 1,000 MW plants!

And he wasn't coy about other future superpowers either, saying: "China has the biggest nuclear plant construction program at present. While they will review their safety practices after the Japanese experience, they will probably continue to develop nuclear power in a big way."

He concluded, "If we have to cut down carbon emissions, we must build a significant nuclear capacity."

Fueling the Future

Given everything I'm hearing from energy insiders, the problem isn't an ebbing nuclear industry...

It's being able to keep up with growing nuclear demand.

That sentiment has been expressed by multiple uranium company executives and reports in recent weeks.

Cameco's Q2 earning's press release said it expects "annual global consumption [of uranium] to exceed annual global mine production by a significant margin over the next 10 years."

Uranium Energy Corp. (AMEX: UEC) CEO Amir Adnani is concerned as well. He was quoted this week saying:

American power plants consume about 55 million pounds of the metal every year to generate 20% of America's electricity, yet the U.S. produces only 3.5 million pounds, and U.S. production has been falling. We rely on imports for about 70% of our oil but foreign countries supply 95% of our uranium. And some of those suppliers are no more stable than certain OPEC members.

He thinks a major supply crunch is ahead.

Today, mined uranium supplies about 66% of global reactor demand; the remaining third comes from secondary uranium supplies, like the so-called Megatons to Megawatts program that recycles nuclear arms into fuel. But that program ends in 2013 with no replacement in sight...

And uranium demand is expected to double by 2030.

Enter: the [best stock play I've seen in years.](#)

It has patented a new type of nuclear fuel that increases uranium's efficiency by 20% to 50%. Imagine getting 450 miles per tank instead of 300 using the same amount of gas...

This technology will allow current uranium supplies to produce much more energy, helping to eliminate any looming supply crunch — and making shareholders incredibly wealthy in the coming years.

A Priceless Benefit

This new fuel — already being backed by GE, Hitachi, and Toshiba — has an added benefit.

Because it can absorb and transfer much more heat than traditional uranium fuel pellets, it can help prevent a nuclear disaster from happening ever again.

The fuel greatly reduces heat transfer if there's ever an off-thermal event, like in Fukushima.

And even if water pumps fail — again, like in Fukushima — this fuel's lower operating temperature would still give plant operators much more time to respond.

What's more, this fuel can be used in all existing boiling water reactors without retrofit.

It already has nuclear plant operators banging on this company's door, all but begging them to rush this new fuel into production.

Once they do, a big share of the \$30 billion nuclear fuel market will be theirs...

Soon, the wait will be over. I was even invited to one of this company's facilities to take a tour and see some of their amazing products for myself. I captured [this video](#) so I could share what I saw with everyone.

Like I said, I haven't seen an opportunity like this in quite some time... and I see good ones all the time.

Now is the time to [pounce on the future of nuclear energy.](#)

Call it like you see it,



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