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# Interview with David Slump

“We want to do more business for India, in India”

David Slump, general manager, global marketing, GE Energy is optimistic about the emerging opportunities in the Indian power industry. In a recent interview with *Power Line*, he speaks about global trends in energy and other related issues. Excerpts...

**What are the key worldwide trends in energy in general and power in particular that you think are especially relevant to India?**

The global trends in energy are one, an increase in demand driven by population. We see an increase in demand that will be met by more fuel diversity. So we are seeing a lot more diversity in fuel and a split of applications – renewables, coal, gas, etc. That is because of the third driver, that is, tighter environmental constraints. Clearly, there is more uncertainty on environmental regulations such as greenhouse gas and climate change. If you take those two drivers, what do you think natural gas prices will be? What about carbon caps? That drives a lot of strategic decisions on whether you will invest in coal, nuclear, wind, etc. And that is happening everywhere in the world, and I don't see much difference here in India. Maybe it is discussed differently, but the fundamental drivers are the same. What are the assumptions on the outlook of gas and the reliability of supply of gas here? If you assume no gas, you go for coal. But if you then assume carbon constraints, you don't like that equation. So the same tradeoffs are here as everywhere else.

**How is the fuel mix changing across the world for new capacity?**

It is very regional because people want to take advantage of their natural resources. So the US has just come off a



gas bubble, and coal and nuclear are on the rebound because they want to take advantage of natural resources in coal, and there are concerns about gas supply and price volatility. In Europe, there are fewer concerns about gas; it is more anti-coal, anti-nuclear and wind-strong. As for India, it has historically been a coal-based market. There is need to take more advantage of hydro and wind and reinvigorate nuclear, but maintain coal. Coal will be strong still. And then the question becomes cleaner coal technologies. Japan maintains a strong nuclear presence and has been going strong on renewables, micro grids and gas. China is very interested in coal, in clean coal technology, gas and renewables.

**Because of the increase in oil/gas prices, renewable sources have become more viable. Do you see evidence of increased interest/investment in wind projects?**

The first point is that we are sold out. We are completely full through 2007. We need to expand our supply chain and capacity to serve that market. So that is one indicator. There are a couple of fundamentals. One, fuel prices are high and that drives the financial equation between renewables or wind. Two, technology has fundamentally driven down the cost of electricity from wind. Three, I think people are learning to understand the business model, they don't look at it just in terms of cost of electricity, but it's a hedge and a broader portfolio. There are a lot more sophisticated buyers

and developers, and that's helped. So, these three things have been driving wind and we see a lot of interest and activity.

**What is GE's involvement in nuclear?**

We are one of the leaders in nuclear energy in the US, Taiwan, Japan and Europe. We supply fuel, new units and we service those new units. In the US we've seen the equivalent of two units of additional capacity through better performance and operations. We are building a plant in Taiwan.

**What is your view on the Indian potential?**

We are excited about the recent agreement between the US and India and have met with a number of members of

the government to see where that might go, and what can be done to help the Congress pass it.

#### **In the US, there has been a revival of nuclear plants. Do you see new plants coming up?**

There is a lot of interest in setting up plants and putting in licensing agreements, but people are still “optimistically cautious” or “cautiously optimistic”. These are still untested waters. So while everybody wants one, nobody wants to go first.

#### **What is your outlook on gas prices?**

Gas is not a global market. In the Middle East and Trinidad, it is under \$1. It's \$6 in the US and \$10 right now in Europe. So there is a lot of volatility.

#### **What about LNG?**

I don't see it as a global market for various reasons, such as transportation issues, weather, storage, etc. It still has to get into the market. I have not yet seen evidence that there is one price because you can get LNG in the US but it gets blended into natural gas in Europe or anywhere else. The price differential is pretty severe. But if you are thinking about power generation, you care about delivered price to your power plant. That's not the price of LNG. There are regional differences – storage, weather, etc. So at any point of time, natural gas has a different price. There might be a global cost of LNG, but that's not the price to the plant.

#### **Coming back to the global market, what are the equipment price trends right now?**

Gas price is settling down. Wind price is going up, there are slight constraints. Biomass prices are up. These are probably the three that matter most.

#### **How have things changed from GE Power Systems to GE Energy?**

When we were GE Power Systems, we were primarily a gas, steam turbine gen-

erator company, and we focused primarily on the power angle. Over the last couple of years, we have invested a lot of money in new product development and a lot of acquisitions. Our capabilities have expanded into plant optimisation and control, into environmental services, etc. So if you now look into industrial plant or utility power plants, our scope has increased. If you look at GE Infrastructure in the broader play, we are in oil and gas, energy, water, aviation and rail, and we could scale on the commonality of that technology. So we will manage the technology flow down from an aircraft engine into a gas turbine into a desalination plant. Filtration technologies are doing air filtration into a power plant. We have really expanded the touch and therefore, we can serve our customers across a much broader capability. As such, we have really repositioned across the energy value chain, not just power systems.

#### **In terms of the future revenue mix, how is it likely to be different?**

It is very different. Traditionally, we would look at it as gas turbines primarily. And today wind is almost equal to gas and our air derivatives. We have our Jenbacher reciprocating engines, which we have used in rural electrification. We have a nuclear business and a hydro business. So that fuel mix, given regional differences, etc. has really driven the revenue mix. The good thing is, from a shareholder's perspective, the volatility and predictability of revenue gives us some hedge and opportunity. Second, it's more the service that's a broader installed base. So if we want to build a local presence in India or in Eastern Europe, it gives us a lot more ability to have service capability that touches wind turbines, gas turbines, steam turbine, etc.

#### **What is your outlook on the Indian market?**

We are excited about the opportunities across every spectrum, continued expansion of our gas business and partnership with BHEL. Also, there will continue to be a growing need for wind, nuclear and coal. The challenges are

expanding our local footprint, having a product market basket of technologies that are more specific to India, and leveraging the technology centre in Bangalore. We see opportunities that we need to position for and that means doing things differently.

We have a strong sales team, a strong marketing team and a strong technology team here. We are expanding our consulting capabilities and our application engineering. So we want to do more business for India, in India.

#### **Are there issues in the sector that concern you?**

Things are faster but will still take time. However, we are a long-cycle business so we are used to that. In the long term, the gas supply issue will work itself out but in the short term, we need to pay attention. Just resourcing to the potential and connecting in our operating rhythm – that's more of an internal issue. The fundamentals are in place.

#### **You are investing in rural electrification. What is the rationale behind it?**

It started with the government's “power for the people” programme and a dialogue with our vice-chairman John Rice and what we could do, what kind of technologies we could provide. The net result is a project that uses Jenbacher gas reciprocating engines with our partner developer Malavalli Power Plant Private Limited on these rural hub initiatives. We think we have come up with both a technical and commercial solution that makes economic sense and we are going to try this out on seven sites. The seven sites will have 30 Jenbacher units of 24 MW of power. If it works, we are quite excited.

#### **Is the Dabhol project a settled issue as far as GE is concerned?**

Yes.

#### **What are GE's objectives as far as India's energy market is concerned?**

Let's just say more is better. ■