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BoyarMiller (a law firm) Energy Update Breakfast Forum -Speakers: Paul Perea - Tudor, Pickering, Hold & Co.; John Berger - Sunnova Energy; Sanjiv Shah - Simmons & Company International





PAUL PEREA



JOHN BERGER



SANJIV SHAH

Takeaway: The oil & gas industry is going through an adjustment phase based on presumed price stabilization engineered by OPEC. Solar energy technology has resulted in a 95% drop in panel prices and stunning technological progress in storage batteries, resulting in huge growth opportunities for this renewable energy source; electricity produced by wind is growing as well, but this energy often has to be transmitted over large distances and it is not as predictable as solar, which can be created and stored on-site and used on-site by residential and commercial customers.

- There are several sizeable CF organizations now in Bullets:
- Houston remains the energy capital of the world; Saudi Arabia's influence lessens with increasing oil output due to fracking in Texas and other states in the U.S.; some renewable energy firms are here to help our city maintain the title of Energy Capital
- Cheap and plentiful natural gas-not just political pressure- is the factor driving coal down to about 28% from 50% of fuel used nationwide to generate electricity
- Texas is the state with the biggest potential for windgenerated electricity, but it may never exceed 20% of total energy generated; solar-generated electricity is steadier and thus more predictable
- Growth in renewable energy depends on technological improvement in batteries to store the electricity and this improvement is happening, ensuring expansion of solar and wind
- Sunnova is exclusively in residential solar panel installation, using the same contract for long terms; contracts are then securitized and sold off; residential customers still contract with local power companies

nationwide to cover any shortage of power coming from their panels

- Ongoing innovation and falling prices will soon make solar users completely untethered to power companies, freeing solar users from any regulatory oversight; this will have big implications nationwide; in the meantime, politicians are subsidizing nuclear and coal fired generation plants, which are increasingly unable to compete with advances by renewable energy providers; we are moving toward deregulation of electricity
- Oil field service companies are in limbo, some stuck with old equipment not yet paid for; traditional lending sources for these companies have largely dried up and financing is coming from other sources; however, so far there has been limited consolidation
- Offshore activity is largely at a standstill due to higher production costs in that sector, although there is some activity in the Gulf and other areas; this sector should see consolidation to ensure survivability in the current pricing climate
- Overall renewable energy is not a threat to fossil fuels since they are used as feedstocks for many other products and can deliver power in ways solar and wind electricity power cannot
- There are some states with increasing solar and wind energy production and declining population and therefore declining demand for electricity generated by coal, oil, & gas
- Nationwide there is a "Byzantine" system of regulation of electricity production and delivery, involving federal, state, and local governments-much or all of this will go away when homes and businesses create and store the energy they need
- Fracking outside of North America has not really taken off due to different ownership rights of subsurface minerals and local pushback against drilling