## **Opening Statement The Honorable Randy Neugebauer (R-TX), Committee Member**

Energy and Environment Subcommittee Real-Time Forecasting for Renewable Energy Development U.S. House of Representatives June 16, 2010 – 10:00

Thank you Mr. Chairman, I appreciate you holding this hearing and bringing together subject matter experts on not only energy of course, but also the views of the national labs, the federal regulator, an economists as well a forecasting provider from the private sector.

At its most fundamental level, renewable power is about harnessing energy from the environment in some fashion. In that sense, being able to forecast the availability of those environmental sources – wind, solar, or water for example – at any one time is critical to knowing when and how much energy will be generated.

Because of its rich oil and gas resources, there has long been an impression that Texas is "behind the times" when it comes to pursuing renewable energy. To the contrary, though, Texas is firmly established as the country's leader when it comes to wind energy, with almost 10,000 Megawatts of installed capacity, more than double any other State.

And I'm sure members by now have heard it, but I never miss the opportunity to remind folks that the highest concentration of wind energy in America is produced in my district.

Despite many years—even decades—of growth in subsidies and vast resources targeted towards research & development – renewable energy sources remain significantly more expensive than conventional counterparts (coal, gas, nuclear).

Yet still today, wind generation costs are averaging over \$150 per megawatt/hour and solar over \$250 per megawatt/hour, compared to conventional costs of approximately \$100 per mw/hour, to the frustration of many.

Nonetheless, the last decade has seen significant integration of renewable energy onto the electric grid, fueled by many of these subsidies as well as State-level Renewable Portfolio Standard mandates.

This growth has resulted in new and increasing challenges for both industry and government. In particular, because renewable energy sources such as wind and solar provide only intermittent contributions to the grid, they result in an increase of reliability concerns and as they ultimately must be backed by baseload power from conventional sources.

The additional burden on baseload power supply to ensure overall grid reliability adds to the cost of delivering electricity. A key question that must be answered is who should

pay for this cost—the renewable energy companies that are being assisted, or the baseload power providers that are doing the assisting.

Regardless of the answer to that key question, there is potential to reduce reliability concerns associated with integration of renewable energy with better weather forecasting and the incorporation of real-time information. As noted in today's testimony, improving forecasting accuracy by even just one or two percent can lead to millions of dollars in savings and alleviate reliability concerns.

It seems the key to these improvements lies with NOAA, which has responsibility for providing weather and water forecasts and developing computer models that are then used by the private sector to develop forecasting products for electricity suppliers. To this end, we need to make sure NOAA has authority to pursue these activities through support for appropriately focused R&D and renewables-focused weather forecasting services.

I thank the witnesses for appearing before the subcommittee today, and I look forward to the testimony and discussion.

Thank you Mr. Chairman