

Bernie Karl, captivated the conference attendees attention with his enthusiasm for his ammonium adsorption geothermal system for brine (sub water) & heat to make use of his 74,575 lbs of 1a 34.8tualTex6f tot (Many

“Utility companies purchase the electrical energy produced from geothermal sources as a renewable base load according to Mark Kapner of Austin Energy. The Oil and Gas Industry could benefit by producing the energy needed for their pumping costs, and where higher water flows and/or temperatures occur, by selling the excess electricity to the grid. For utility companies needing to expand their electrical production, risk is an important factor determining the energy sources for building new utilities. Roger Hill, of Sandia National Lab, pointed out from a 2003 study that the risk factor for new geothermal development was a standard deviation of approximately 0.12, gas 0.17, new nuclear is 0.14, new coal 0.13, and new wind 0.04. For a utility portfolio to maximize its cost and risk, renewables such as wind and geothermal are important energy sources. The ability to create and sell RECs - renewable energy credits (1 REC = 1 MWe hour)- was the topic of an instructive talk by Tim Smith of Element Markets Inc. He emphasized the additional value that renewably generated electricity has in the renewable market as a viable commodity. Many states now have a Renewable Portfolio Standard. Russel Smith, TREIA Executive Director, helped establish and expand the Texas Renewable Portfolio Standard. He pointed out the encouragement for further diversification of renewable energy projects provided by the inclusion of a 500 MW target for non-wind renewable

