

MR. PHILLIPS: My name is Tom Phillips. I'm a Chemical Engineer. My last work assignment before retirement was in the Business Development Department of the world's largest energy company. I'll be blunt. The economics of coal fire and power generation are not good. Coal can no longer compete with natural gas, wind, and solar. The era, the era of coal is coming to a close. This is happening, not just in the U.S., but also around the world. It is a global movement. Both India and China are moving away from coal. This means they're not only is the domestic market shrinking, but also the export market. The economics of coal are further threatened by probable carbon taxes around the world. Here in the U.S.A., massive amounts of natural gas will result in the long term, low prices for natural gas, making coal permanently uneconomical. Pure, nonpartisan economics dictate the end of the coal era. Unsubsidized gas, wind, and solar are now - or soon will be cheaper than coal-fired power generation. Wind and solar will continue to fall in price over time, putting even more pressure on coal. Here in Colorado, the Federal royalty on coal is just \$0.23 per ton. Whereas, the sales price was over \$30 per ton in 2014. If the Federal royalties on coal were on a par with Federal oil and gas, the royalty would be almost \$4 per ton, not \$0.23. This low royalty rate is a subsidy, or give-away, to the coal industry. Given the current and future poor economics of coal, it is highly unlikely that further coal company bankruptcies will occur. And that these insolvent coal companies will simply walk away from their mines, leaving taxpayers with the cleanup bill, like so many other extractive industries of the past. The latest electric power monthly report released late last month by the U.S. Energy Information Administration revealed that wind and solar generation increased 32 percent. While coal-fire power generation plunged 24.2 percent. Also, in the first quarter of 2016, over 1200 megawatts of new power generation was installed. All but 18 of that was wind and solar. And that 18 was natural gas. There was no new coal-fire power plants built in the United States. In summary, the economics of coal are bad, both now and in the future. A future carbon tax on coal is probable, making the economics even worse. Rapidly falling wind and solar costs will make coal economics even worse. Huge and growing reserves of cheap natural gas make coal economics even worse. The big coal killer here is not

wind and solar. It's cheap natural gas. Coal just can't compete with that. Because of these market forces, financing of new coal projects will be very difficult, if not impossible. The cold-hearted forces of capitalism [indiscernible] in the future of coal is undeniably bleak. Consequently, I recommend that the BLM adopt a policy that eliminates new coal leases because they will be uneconomical and doomed to fail. Royalties for coal should also be right to a level equal of those collected on [indiscernible]. Taxpayers should not be subsidizing one of the highest carbon fuels in the world. In addition, the BLM must ensure that when existing coal mines inevitably close, the coal companies pay for the cleanup and not be on the taxpayer. Thank you.