I AM PLEASED TO BE HERE TODAY TO DISCUSS THE MANY BENEFITS OF COAL SLURRY PIPELINES, INCLUDING THE TECHNOLOGICAL, FINANCIAL AND ENVIRONMENTAL ADVANTAGES OF THIS ADVANCED TRANSPORTATION MODE.

THE CONCEPT OF A COAL SLURRY PIPELINE ORIGINATED IN 1890 WHEN THE FIRST U.S. PATENT WAS GRANTED TO WALLACE C. ANDREWS, PRESIDENT OF THE NEW YORK STEAM COMPANY. TODAY, THERE ARE MANY SLURRY PIPELINES LOCATED AROUND THE WORLD, INCLUDING LINES THAT ARE MOVING LIMESTONE IN CALIFORNIA, COPPER CONCENTRATE IN ARIZONA, AND COAL IN ARIZONA AND NEVADA. THESE LINES ARE REPRESENTATIVE OF AN ALREADY EXISTING TRANSPORTATION INDUSTRY THAT IS GROWING RAPIDLY BECAUSE OF THE BENEFITS IT AFFORDS SHIPPERS OF ANY MINERAL WHICH CAN BE GROUND TO A POWDER AND MIXED WITH WATER FOR PUMPING THROUGH A PIPELINE.

THE TECHNOLOGY IS CONSTANTLY BEING IMPROVED THROUGH EXPERIENCE, AND EACH NEW LINE IS MORE EFFICIENT THAN ITS PREDECESSORS. THE SUCCESS OF THE BLACK MESA PIPELINE, WHICH YOU JUST SAW, PROVES THAT THE STATE OF THE ART, EVEN A DECADE AGO, WAS BOTH EFFECTIVE AND EFFICIENT.
The proposed coal slurry pipelines, including the one planned by ETSI, are to be privately financed, as has been the case for other types of energy pipelines. We are asking for no government subsidies or taxpayers money. Sometimes we do get the impression from our visits to Washington that perhaps we would have more success if we did ask for subsidies.

For consumers, coal pipelines represent potential relief from the pressures of steeply rising electric bills. The technology is capital intensive and highly automated, so the major costs are fixed at the outset. Only about 30 percent of pipeline costs relate to such factors as labor, supplies, and electric power. Thus, slurry pipelines are insulated from the effects of inflation, unlike the competing railroads. The constant rise in rail rates was exemplified just recently by the announcement of yet another application for freight rate increases, this time averaging 7 percent nationally. A few weeks ago the Louisville and Nashville Railroad won a 22 percent increase for hauling coal in the East. Calling this hike "unreasonably large", an official of L&N's largest customer estimated that this increase would cost the utility about $22.2 million in the first year. The dilemma of utilities in states like Texas can be seen in the recent ICC decision raising rail rates for the coal haul from Wyoming to a San Antonio power plant. When the city was deciding on the kind of plant to build, the rate quoted was $7.90 a ton. In less than five years, the railroads tried to raise it to $18.23. Last month, the ICC finally allowed $16.12. This obviously has a significant impact on San Antonio utility customers, but it also has implications for the national effort
TO CONVERT ELECTRIC POWER PLANTS TO COAL, A SAN ANTONIO OFFICIAL TESTIFIED EARLIER THIS YEAR TO THE ICC THAT ANY RATE HIGHER THAN $15.64 A TON WOULD MAKE IT CHEAPER TO SWITCH THE PLANT BACK FROM COAL TO OIL. THIS IS A GLOOMY PROSPECT WHEN YOU CONSIDER THE BALANCE OF PAYMENTS PROBLEMS AND THE STATE THE ECONOMY IS IN TODAY.

THE MOMENTUM AND ECONOMIC INCENTIVE TO CONVERT FROM OIL AND GAS TO COAL WILL BE GREATLY ENHANCED IF THE TRANSPORTATION COSTS ASSOCIATED WITH THE COAL USED IN DISTANT GENERATION PLANTS ARE STABLE WITH RESPECT TO TIME. IT HAS BEEN PREVIOUSLY NOTED THAT THIS STABILITY CAN BE ACHIEVED WITH THE CAPITAL INTENSIVE COAL SLURRY PIPELINE MODE OF TRANSPORTATION. HOWEVER, WE SUGGEST THAT THE PRICE OF RAILROAD DELIVERED COAL TO DISTANT GENERATION PLANTS WILL IN THE LONG TERM TEND TO FOLLOW OPEC OIL PRICES. IN THE FUTURE, AS THE GAP OPENS BETWEEN OPEC OIL PRICES AND RAIL-DELIVERED COAL, RAIL LABOR AND MANAGEMENT WILL VIEW THIS AS A PIECE OF PIE TO CUT UP BETWEEN THEM.

MONOPOLISTIC PRACTICES OF THE RAILROADS, THE BURLINGTON NORTHERN IN PARTICULAR, ARE FURTHER EVIDENCED BY THE ICC’S DECISION IN THE SAN ANTONIO CASE, IN WHICH THE BURLINGTON NORTHERN WAS ACCUSED BY THE ICC OF “BAIT AND SWITCH” TACTICS.

“SAN ANTONIO WAS PERSUADED TO ENTER INTO PARTICULAR LONG-TERM ARRANGEMENTS FOR THE SUPPLY OF COAL AS FUEL BASED UPON A PERCEIVED BARGAIN WITH DEFENDANTS. ONCE THESE COMMITMENTS HAD EFFECTIVELY ELIMINATED THE RAILROADS’ COMPETITION, THEY ENGAGED IN VARIOUS PRICING MANEUVERS IN AN ATTEMPT TO USE THEIR NEWLY MONOPOLISTIC POSITION TO ENHANCE THEIR REVENUES...”
A category that has assumed a place of prime importance in this country today, as well it should, is protection for the environment, and here I think the advantages of a coal slurry pipeline are especially evident. The system is completely buried where it can cause no noise, no air pollution, no fires, accidents or any interference with surface traffic. It will be routed through open country to avoid towns and communities, as well as historic and environmentally sensitive areas.

The pipeline will meet rigid construction and safety standards. Pipeline transportation, now comprising a 400,000-mile U.S. network of oil, gas and other petroleum products lines, has an excellent safety record. Coal pipelines are the safest of all because the coal-water slurry is not flammable.

In the terminal area, the water is separated from the coal and can be purified to any degree desired; including Environmental Protection Agency stream standards. Normally such water is treated and then used as part of the cooling water supply for the power plant.

Coal slurry pipelines obviously use water, a requirement that often has been portrayed as an environmental issue to confuse the situation. We would like to think that water is a natural resource question, with its use determined by each state, and not an environmental issue, with its use determined by the federal government or outside "armchair experts". Water is a valued resource in Colorado, and indeed in all the Western states, and close attention is paid to its allocation. Water must be used wisely, but as with all things, it is a matter of priorities. In energy development in the West, coal slurry pipelines must compete with other potential industrial users,
BUT IT SHOULD BE RECOGNIZED THAT A COAL PIPELINE USES ONLY ONE-EIGHTH OF THE WATER REQUIRED BY A CONVENTIONAL MINE-MOUTH POWER PLANT. THEREFORE, IN THIS SENSE, SLURRY PIPELINES CONSERVE A VALUABLE RESOURCE.

STUDIES OF WESTERN WATER, INCLUDING ONE BY THE U.S. OFFICE OF TECHNOLOGY ASSESSMENT, HAVE FOUND THERE IS SUFFICIENT WATER IN THE WEST FOR THE SEVERAL SLURRY PIPELINES WHICH HAVE BEEN PROPOSED. IT THEN BECOMES A MATTER OF FINDING SUPPLIES WHICH WILL NOT INTERFERE WITH OTHER, HIGHER PRIORITY USES.

IN THE CASE OF ETSI, WE EXPLORED THE MADISON FORMATION, A DEEP UNDERGROUND AQUIFER IN NORTHEASTERN WYOMING, ESTIMATED TO CONTAIN ONE BILLION OF ACRE FEET OF WATER. THIS SOURCE IS RELATIVELY UNTAPPED, AND THE REASON IS CLEAR. FARMERS AND RANCHERS TYPICALLY PAY $8 TO $10 AN ACRE FOOT FOR WATER, WHILE PIPELINE SUPPLIES WILL COST 20 TO 30 TIMES THAT AMOUNT TO BRING WATER TO THE SURFACE FROM GREAT DEPTHS. ONLY AN INDUSTRIAL USER CAN AFFORD TO TAP THIS PARTICULAR SOURCE.

AS TO THE AVAILABILITY OF WATER, HUGH H. HUDSON OF THE USGS SAYS THAT IT "IS ESTIMATED CONSERVATIVELY THAT 70,000 TO 80,000 ACRE-FT. MAY BE PRODUCED ANNUALLY FROM THE MADISON WITHOUT AFFECTING EXISTING WELLS."

THE STATE OF WYOMING, AFTER CAREFUL EXAMINATION OF THE DATA, GAVE APPROVAL TO ETSI TO WITHDRAW UP TO 20,000 ACRE FEET PER YEAR, SUBJECT TO STRINGENT PROTECTIONS FOR PRESENT AND FUTURE USERS OF THIS AQUIFER. FURTHERMORE, AS YOU ALL KNOW, IT IS ONLY WHEN WATER IS PUT TO BENEFICIAL USE BY A STATE CAN THAT STATE LEGALLY RETAIN ITS POSSESSION OF THE WATER. Thus,
WYOMING HAS TAKEN A STEP FORWARD IN DEVELOPING A RELATIVELY UNUSED WATER SOURCE THAT WILL CONTRIBUTE SUBSTANTIAL ECONOMIC BENEFITS TO THE STATE.

A SIMILAR SITUATION IS UNDER STUDY IN SOUTH DAKOTA. THE WESTERN PART OF THE STATE IS IN DIRE NEED OF WATER, BUT THE COMMUNITIES THERE CANNOT AFFORD TO BUILD A PIPELINE FROM THE ENORMOUS OAHU RESERVOIR ON THE MISSOURI RIVER. BY EXPANDING THE PIPELINE TO SUPPLY INDUSTRIAL USERS, HOWEVER, ECONOMIES OF SCALE ARE IMPROVED. IN ADDITION, INDUSTRIAL USERS CAN BE CHARGED MUCH HIGHER FEES, CREATING A FORM OF SUBSIDY WHICH MIGHT BE ABLE TO DELIVER ADEQUATE WATER TO THE SOUTH DAKOTA COMMUNITIES AT AN AFFORDABLE RATE.

IT WOULD BE EXPECTED, THEN, THAT COAL SLURRY PIPELINES WOULD BE WELCOMED AS A VALUABLE ADDITION TO THE ENERGY TRANSPORTATION SYSTEM, ESPECIALLY AT A TIME WHEN THE NATION IS IN THE MIDST OF A MAJOR EFFORT TO SHIFT ITS FUEL BASE FROM OIL AND NATURAL GAS TO COAL.

YET, BECAUSE OF RESTRAINTS WHICH ARE BOTH LEGAL AND MONOPOLISTIC, ONLY ONE COAL SLURRY PIPELINE IS NOW OPERATING IN THE UNITED STATES. THAT IS THE PREVIOUSLY MENTIONED VERY SUCCESSFUL AND COMPETENTLY RUN BLACK MESA PIPELINE, WHICH JOHN MONTFORT WILL DISCUSS IN THE NEXT FEW MINUTES.

THE BARRIER TO FURTHER DEVELOPMENT OF COAL SLURRY PIPELINES LIES WITH THE RAILROADS. WE MUST CROSS DOZENS OF RAILROAD TRACKS TO CONSTRUCT A PIPELINE SYSTEM. THE RAILROADS HAVE THE LEGAL RIGHT IN MOST CASES TO BLOCK SUCH CONSTRUCTION BY REFUSING TO SELL CROSSING PERMITS. IF THAT RIGHT IS LEGAL, IT ALSO IS MONOPOLISTIC, FOR THE RAILROADS ARE PRESENTLY THE ONLY WAY TO HAUL
COAL LONG DISTANCES IN THE WEST. IF THE SLURRY PIPELINE INDUSTRY IS TO GROW AND PROVIDE ADDITIONAL CAPACITY, ALONG WITH VITAL RATE COMPETITION TO HELP CONTROL COSTS, THEN EMINENT DOMAIN WILL BE NECESSARY. SUCH AUTHORITY, WHICH WOULD PUT COAL PIPELINES ON A PAR WITH ALL OTHER MAJOR FORMS OF ENERGY TRANSPORTATION, IS CURRENTLY PROVIDED IN ONLY A FEW STATES. FEDERAL LEGISLATION IS THE BEST AND MOST EQUITABLE WAY OF EXPEDITIOUSLY OPENING THE WAY FOR COAL SLURRY PIPELINE DEVELOPMENT WHEREVER IT MIGHT BE NEEDED.

INNOVATION IS THE GREAT TRADITION AND STRENGTH OF THE AMERICAN ECONOMY. NOW IT IS TIME FOR AN ADVANCED TECHNOLOGY TO PLAY ITS ROLE, PROVIDING AN ECONOMICAL AND ENVIRONMENTALLY SOUND ADDITION TO THE ENERGY TRANSPORTATION SYSTEM AT A CRITICAL TIME IN OUR NATION'S HISTORY. IF WE CAN ACHIEVE THE LEGISLATION WHICH WILL PUT US ON A COMPETITIVE FOOTING WITH THE RAILROADS, I AM CONFIDENT COAL SLURRY PIPELINES WILL MAKE AN IMPORTANT CONTRIBUTION TO RESOLVING THE ENERGY DILEMMA.