COAL TRANSPORTATION PROBLEMS IN THE MIDWEST

HEARING

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OF THE

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COAL TRANSPORTATION PROBLEMS IN THE MIDWEST

WEDNESDAY, DECEMBER 17, 1980

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON TRANSPORTATION AND COMMERCE,
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Columbus, Ohio.

The subcommittee met, pursuant to notice, at 10:30 a.m., in hearing room 2, State Office Building, 65 South Front Street, Columbus, Ohio, Hon. James J. Florio, chairman, presiding.

Mr. FLORIO. The subcommittee will come to order.

The Subcommittee on Transportation and Commerce will today be exploring coal transportation problems in the Midwest.

I am pleased that Congressman Brown, who is vitally interested in this topic, and at whose request this hearing is being conducted, is here today with us.

Coal is, of course, going to be a very crucial commodity in our Nation's future.

It is an indispensable part of our National Energy Policy, and our goal of striving toward a high degree of energy independence. It is also of great importance to other nations, who will look to the United States for their coal supplies. In fact, there are those who have described the United States as the OPEC of coal.

Today, we will be focusing on the demand for Midwest coal for export. We will explore the potential level of this demand, and the capacity of our transportation system to handle the potential levels of traffic.

Of particular concern to the subcommittee, is the ability of the Nation's railroads to transport coal from mines to ports for export. And the ability of those ports, like New York, Philadelphia, Baltimore, Norfolk, and New Orleans, to handle the huge expected increases in export traffic.

I would like at this point to recognize the gentleman from Ohio, a very valuable member of the Interstate and Foreign Commerce Committee, Congressman Clarence J. Brown.

Mr. Brown. Mr. Chairman, Jim Florio, I want to extend a warm welcome to you to my State of Ohio, and express my deep thanks for convening this hearing on the vital issue of how the United States can increase it's ability to meet the growing worldwide demand for steam and metalurgical coal.

Mr. Chairman, the State of Ohio is estimated to have a total of some 45 billion tons of coal under its surface, and in many instances, very near the surface.

The States around us, Indiana, Illinois, Kentucky, and West Virginia, also enjoy vast reserves of coal. Much of the coal industry in these Midwest and Appalachian coalfields are not operating at or near full capacity, and yet the evening news is filled with stories of the great surge in the European demand for coal, and demand increases in the Far East.

As we sit here in Columbus, there are approximately 100 tankers waiting idle for coal in such ports as Hampton Roads, Va., and Baltimore, Md. While these ships wait to receive coal from the dockside facilities, the coal waits in railcars because the port storage and loading facilities cannot handle the demand.

As railcars wait to unload, the railroad system backs up, resulting in unnecessary loss and delays.

The entire transportation systems inability to meet the present demands, may threaten the American share of this growing worldwide demand for coal.

Our European trading partners are drawn to the United States by our huge reserves of coal, the largest in the free world, by our national stability, and by our potential ability to produce and deliver that coal. But they may be forced by economics to look elsewhere to satisfy their need for coal if we can't produce and deliver it.

The recent surge in coal export demand has uncovered the long existing deficiency in our national transportation infrastructure. By this term, we include every element of the transportation system, which moves coal from the mine into the hold of the ship.

Mr. Chairman, our new opportunity to further increase our sales abroad cannot be realized unless we identify and remedy each element of deficiency in the transportation infrastructure, a function of your subcommittee and the incoming full Energy and Commerce Committees.

Today's hearings promise to provide the Congress with a healthy dose of information on the problems of the transportation infrastructure relating to the export of Midwest, particularly Ohio, coal.

We are further fortunate to have as witnesses, representatives of the coal industry and the mineworkers, from the railroad industry, the Ohio River Barge Industry, from the Lake Erie Port Authorities, and from the transhipping industry at the Port of Quebec.

With these in attendance, Mr. Chairman, we have assembled the three potential routes for transporting Midwest coal for export. By rail, to the principal east coast ports, by barge to gulf coast ports, and by laker to transhipment facilities in Quebec.

The real prospects for improving and developing each transportation route, and thereby the market for our coal, depends upon two essential factors: The ability of each route to become as economical as possible, a set of problems that we must identify and remedy, and second, upon the size and duration of the world demand for coal, a factor that we cannot entirely control, but can influence.

The more efficient our transportation system is, the greater our ability to capture a fair share of the market will be.

Mr. Chairman, Ohio's coal has a favorable Btu rating, but a rather high sulfur content. Ohio coal has an opportunity to take part in the export market, if steam coal can be economically blended at port facilities.

This promising opportunity to revive our State's coal industry, and put its workers back on the job, will not be realized easily.

Ohio's coal opportunities are tied directly to the fortunes of other Midwest and Appalachain coal industries, and to the efficiency of the transportation system.

Perhaps the most difficult element to forcast, is the nature of the world coal demand. For how long will this year's dramatic increase, up 37 percent since 1979, continue?

What is the likely prospect of putting Ohio coal aboard ships bound for Europe? Today's hearings should be helpful in answering these and other questions.

Again, Mr. Chairman, I am delighted that you have come to Ohio to examine the opportunities and problems of exporting coal, we thank you for it.

Mr. FLORIO. Thank you very much.

Our format this morning is that we have a series of four panels.

I would like to invite the first panel to come forward.

Ms. Connie Holmes, vice president of Nation Coal Association.

Mr. Robert Daignault, marketing manager of Y & O Coal Co.

Mr. Robert Friedrick, senior vice president, Consolidation Coal Co.

Mr. Neal Tostensen, executive vice president of Ohio Reclamation Association.

Mr. Robin Turner, vice president, Administration of North American Coal Corp.

Mr. John Guzek, president, district 6, United Mine Workers of America.

If our panelists will come forward and be seated at the table, please.

It is my understanding that we have some substitute witnesses, in lieu of the list of witnesses that was provided to us, so I think that it might be easiest if we ask our six witnesses to identify themselves, perhaps starting from left to right.

Mr. TOSTENSEN. I'm Neal Tostensen, president of the Ohio Mining and Reclamation Association of Columbus, Ohio.

Mr. GRIM. I'm Charles Grim, the international coordinator for the United Mine Workers.

Mr. TURNER. I'm Robin Turner, vice president of administration, North American Coal, Cleveland.

Ms. HOLMES. Connie Holmes, vice president of economics, National Coal Association.

Mr. DAIGNAULT. Robert Daignault, marketing manager, Y & O Coal Co.

Mr. BOYLE. Bill Boyle, export coordinator for Consolidation Coal Co.

Mr. RUDOLPH. Edward Rudolph, distribution manager for Metallurgical and Export sales for Consolidation Coal Co.

Mr. BROWN. I didn't get your name, I'm sorry?

Mr. RUDOLPH. Rudolph, Edward Rudolph, Consolidation Coal.

Mr. FLORIO. Ms. Holmes, you are first on our list.

STATEMENTS OF CONNIE HOLMES, VICE PRESIDENT OF ECONOMICS, NATIONAL COAL ASSOCIATION; ROBERT E. DAIGNAULT, MARKETING MANAGER, YOUGHIOGHENY AND OHIO COAL CO.; EDWARD RUDOLPH, DISTRIBUTION MANAGER, AND BILL BOYLE, EXPORT COORDINATOR, CONSOLIDATION COAL CO.; NEAL S. TOSTENSEN, PRESIDENT, OHIO MINING AND RECLAMATION ASSOCIATION; ROBIN TURNER, VICE PRESIDENT, ADMINISTRATION, NORTH AMERICAN COAL CORP.; CHARLES GRIM, INTERNATIONAL COORDINATOR, UNITED MINE WORKERS OF AMERICA; AND SAM SPECK, OHIO STATE SENATE ENERGY ENVIRONMENT AND NATURAL RESOURCES COMMITTEE

Ms. HOLMES. Thank you very much.

Mr. FLORIO. Incidentally, for the record, the statements that you may have will be introduced into the record in their entirety, and you may feel free to proceed in a summary fashion. [See p. 8.]

Ms. HOLMES. Thank you very much.

My name is Connie Holmes, I am vice president of economics, National Coal Association, and I'm also executive secretary of the Coal Exporters Association, an affiliate of the NCA.

The National Coal Association is an organization of coal producers, sellers, transporters, and others involved in the production of, and the use of coal.

The Coal Exporters Association has a little narrower constituency, we represent the exporters and the producer-exporters and the broker-exporters of coal.

In total, I believe our association represents approximately 90 percent of all coal exported overseas.

We sincerely appreciate the opportunity to be here today, Mr. Chairman, in Columbus, to talk about the opportunities of U.S. coal overseas.

I am going to focus my statement on the overall subject of worldwide demand, and leave to the producers that are with me on the panel today, to focus the discussion on demand for Ohio coal for export.

I appreciate the opportunity to put my entire statement in the record, it is rather lengthy, and I am only going to summerize today, by concentrating on three points.

First: The outlook for coal use and trade worldwide.

Second: The overall outlook for U.S. coal in the world market, in both the short term and the long term.

And finally, the problem areas which must be addressed to assure that the U.S. potential overseas are realized.

Since the 1973–74 Arab oil embargo, Government leaders in the United States, and in other oil dependent countries throughout the world, have been discussing the return to coal.

In most of these nations, discussions have been fortunately followed by plans for action, and coal consumption has increased for steam generation purposes, in Europe, especially over the last 5 years. During the next decade, coal production and use in the OECD countries, has the potential for doubling over current day levels, and the outlook for coal use is getting brighter every day.

For example, when the world coal study was released last May, many said, and frankly, some of ourselves included, said that the high case estimates, the total coal use within OECD countries, of some 1.6 billion tons of coal equivalant, by 1990, was almost unobtainable.

But, just last week, the coal industry advisory board to the IEA, issued a report showing the world coal estimates were certainly attainable, and very realistic.

According to a conference held at the White House, last Monday, reports by President Carter and members of the coal industry-interagency coal export task force indicated that the world coal estimates and the CIAB estimates were probably reasonable to moderate, so every day we are seeing the forecast of coal use increase.

Political commitments, through the IEA, at the Venice summit, have been made, to sharply cut oil use—to sharply increase coal use; these commitments are reinforced by economics.

All oil prices are rising very rapidly, oil supplies are not politically stable. Nuclear programs are being delayed, and energy supplies are an economic necessity to insure the continued growth; in fact, they are a necessity to insure that economies even maintain the status quo.

Coal is the logical fuel to use. It is reliable and it will be used as the source of energy, both now and increasingly in the future.

An increase in further coal use means concurrently an increase in coal trade, and we believe that the United States is in a unique position to take advantage of this growing, new market for steam coal abroad.

We have substantial coal reserves, large enough to support a substantial increase in both domestic demand, which we do forecast, as well as for a vastly increased export level.

We have an established and a very highly competitive coal industry, large enough to insure the continued availabilty of coal for a a long-term contract.

We enjoy the advantages of long-term political stability, and we have support from our Government for the sanctity of the long-term contract.

Finally, our Government is committed, through the IEA and through economic summits, to encourage and to assist a sharp increase in coal trade, and a sharp increase in coal exports from the United States.

But despite these very favorable advantages, our long-term future cannot automatically assume to be assured.

We have competition, and we must work and work hard to get the market and to keep the market.

Over the last year, members of the National Coal Association, the Coal Exporters Association, our friends from the union, and our friends in the transportation industries have met with delegations from a number of different countries, including Austria, France, the Netherlands, Denmark, Japan, and Korea. Each country has put a little different perspective on the problems and the potentials of coal use, but one message was very, very clear, and that message was, these countries want—they need U.S. coal, but these coals have to be made available on a long-term and a reliable basis, and the coal must be delivered on a timely basis, and at a rate which is cost competitive with other coal-producing nations throughout the world.

Repeateldy, two major constraints are brought out, that stand in the way of the American coal producer from realizing the full potential of this new world market.

First, our ports are old and inadequate, they cannot handle the 1980 levels of exports.

Second, our harbors and our channels do not compete in the world market. In other words, they are too shallow, and they must be dredged to depths of at least 55 feet, to accommodate the larger, more cost effective vessels that we believe will be the norm and not the exception in the future.

The first constraint, inadequate port capacity, is very visible, as you have pointed out.

There are over 100 vessels on the East Coast now waiting to take on American coal. Wait times can exceed 40 to 45 days in the extreme. The moorage costs are adding upward of $10.00 per ton to the delivered cost of our coals abroad.

This puts us in a clearly uncompetitive position.

In the short run, I will have to say that we have made many strides at increasing a fixed, port capacity.

The railroads have taken many actions, the transhippers have taken many actions to increase a loading rate, from less than 50 million tons on an annual basis during the first quarter of this year, to an annual basis of over 85 million tons during the third quarter. So, using our fixed capacity, things are improving. We are exporting coal from places that 1 year ago, would have been deemed almost impossible.

There is more coal going out of the gulf coast, there is—there are some coal movements going from the west coast, and late this year we saw the Ports of Ohio take some small advantage of the overseas export market, because some small tonnage's have gone out of the Ohio ports, through the St. Lawrence Seaway, and we expect that this will continue next year.

In the longer view, private industry is, we believe, moving very rapidly to increase our port capacity. Over the last 6 months, and these projects are all detailed in my statement, and I am not going to go down the list here, but over the last 6 months, over 100-million tons of new port terminal capacity on the east and gulf coasts have been announced.

We expect shortly that there will be announcements of additional capacity on the west coast, and we expect that others here today will talk about plans for using Great Lakes ports in the short, and possibly in the longer term.

So we believe that the question of port capacity is being handled by the private industry, and that within the next 2 years, we will see a great deal of relief from this congestion situation that we are now experiencing.

But the issue of dredging, is quite another matter. As you know, the responsibility for maintaining and improving our ports, is a Federal Government responsibility, and as such, the Corps of Engineers must be authorized by the Congress to undertake the improvements necessary.

We are certainly very encouraged by the number of bills that we saw introduced in the Congress in the past few days of the session,

to do just that, and we urge early support—your early support next year, in the very early days of Congress, to authorize and appropriate funds to dredge harbors and channels, to appropriate to sea ports to depths of 55 feet or more.

To provide authority to expedite the permit review process and the environmental review process, for both the dredging projects, and for the shoreside facilities that are under construction.

And finally, to authorize the Corps of Engineers to proceed with advancing engineering and design work on projects that have already been approved by the Corps district engineer.

To proceed with the A.E. & D. work concurrently with the permit review process.

Swift response, we believe, by the Congress, and by private industry, toward the solution of our transportation problems, will assure our potential customers that we are really serious about selling coal, and about delivering it to them on a cost competitive and a timely basis.

We think that these actions will go a long way toward encouraging the signing of long-term contracts for our coal, and I don't have to add, that these long-term contracts are vital to insure the investments here in our mines, to insure the creation of long-term employment for our miners, and to insure that the United States will take a long-term advantage of our full potential in the world coal market.

I would be very pleased to elaborate on either the short-term outlook for the port congestion situation or the short-term outlook for export coal, or for—or on any other areas in my statement at the conclusion of the panel.

Thank you, Mr. Chairman.

[Testimony resumes on p. 35.]

[Ms. Holmes prepared statement and attachment follow:]

STATEMENT OF CONNIE HOLMES, EXECUTIVE SECRETARY, COAL EXPORTERS ASSOCIATION AND VICE PRESIDENT NATIONAL COAL ASSOCIATION ON OUTLOOK FOR DEMAND FOR U.S. COAL FOR EXPORT.

The year 1980 is a pivotal year for the United States coal exporter in that it marks the entrance of the United States, long the largest world supplier of metallurgical coal, as a major force in the world steam coal market. The development of this new and rapidly growing market has not been without its problems however, as eloquently discussed in innumerable articles and analysis describing the numbers of vessels waiting off our coasts to take on American coal.

To understand the reasons that the 1980 export demand has caused so many visable problems, as well as to assess the future outlook for U.S. coals in the future world market it is necessary to understand what has happened to the market over the last ten years.

The purpose of this statement is four fold:

- to discuss the history of coal exports
- to review the export market of the 1970's
- to outline the reasons underlying the increase in demand in 1980 and the problems associated with it.
- finally to give a brief assessment of the future outlook for U.S. coals in the world market.

History of U.S. Coal Exports

The United States began exporting coal in the late 1800's. At first the U.S. shipped very small quantities to Canada, and beginning in 1897 and 1898, to the east coast of South America. Shipments to European countries began on a very limited basis in 1902 and these shipments increased gradually until World War One when shipments overseas increased from the 8 million tons per

year level to 22 million tons. After the war, exports dropped as fast as they has increased and, with the exception of exports to Canada, remained at very low levels until just after World War II when the United States again emerged as a major coal exporter. World War II left the coal industries of Europe in ruin. As the United States was the only country able to supply the large quantities of coal at the reasonable prices needed for reconstruction of the European economy, U.S. coal exports overseas expanded rapidly to 42.5 million tons in 1947. Additionally, we shipped 26.2 million tons of coal to Canada in that year for a total export of 68.7 million tons. Unfortunately, that level was not reached again until 1957, when exports reached an all time high 76.4 million tons -- a high that has not again been attained until this year, 1980.

The U.S. has always been the largest coal exporter in the world, but over the years the level of U.S. coal exports has fluctuated widely. Traditionally, the United States has exported approximately 9-10 percent of our total coal production. Our exports have been primarily metallurgical grade coals, our market areas were first Canada and European countries and, after World War Two, Japan.

The decline of the 1970's

The levels of coal exports have always been cyclical; related to worldwide economic conditions and world steel production levels. In the 1970's several other factors affecting the demand for U.S. coals overseas exaggerated this cyclicality and caused our export levels to go from an almost all time high of 71 million tons in 1970 to an almost all time low of 40 million tons in 1978. These factors included:

- full scale entry into the world market of several, lower production cost competitors including Australia, Canada and South Africa.
- a mid-1970's decline in the demand for met coal (coupled with new supplies, this meant an oversupply of met coal worldwide)
- rapidly increasing transportation and production costs in the 1970's due in part to meeting various government regulations caused the United States to become the highest cost supplier.
- labor problems in the Appalachian coal fields in the mid 70's through 1978, caused the U.S. to become known as an unreliable supplier
- failure to participate in the steam market which began to develop in the 1974-75 period, due to our inability to compete on a cost basis.

As a result, the United States became the swing supplier of coals, or the supplier of last resort.

During the 1970's the markets for U.S. coal shifted and the time required to shift marketing strategies and to penetrate new markets contributed still further to the low export levels of 1977 and 1978.

In 1970, 39 percent of our exports were going to Japan, 23 percent to the EEC countries. Our Japanese market peaked in 1975 when we shipped almost 46% of all export coal to that country. In the years that followed the bottom fell out of the Japanese market as Japan sought to diversify their coal supplies and to buy from cheaper services. As a result, our exports to Japan fell by almost 1/3 in just two years and we had to find new markets, in Europe, South

America and other far eastern countries for these displaced U.S. coals.

By 1979, the center of focus had shifted to these new markets and as a result greater tonnages were shipped to the EEC countries to Korea and Taiwan and to South America destinations than at any time in history.

Late 1979 also marked the initial, and unexpected entry of the United States in the world steam coal market. In the last half of the year (almost all fourth quarter) 2½ million tons of steam coal went from east coast ports to Europe.

1980 - A Record Export Year

As late as mid 1979, the United States was not expected to enter the world steam coal market until 1985 or beyond because we were simply not cost competitive with competing countries. It was automatically assumed that supply from these competing countries would more than meet a reasonably slow growing world demand and that the U.S. would continue to pick up the pieces. 1980 has proven us all wrong.

In the last 12 months, the overseas demand for U.S. coal has literally exploded. Actual 1980 exports will be at least 25 million tons above the most optimistic forecasts of a year ago. By all accounts, we will lose several million tons in overseas sales this year because our current system cannot move more coal out of the country. This problem is very visable on the east coast where over 100 ships are now waiting to take on United States coals.

It is important to point out that the increase in demand for coal has been for both met coal and for steam coal and the reasons are somwhat different.

. Overseas shipments of metallurgical coal will increase from 43 million tons in 1979 to 57 million tons in 1980 despite an actual small decline in world steel production because:

- Strikes in the Australian mining railroad and port industries cut Australian exports of coking coal by almost a million tons in May, over a million tons in July and by over two million tons in August. These lost shipments - about 2/3's to Japan and 1/3 to Europe, were made in large part by spot coal purchases from U.S. suppliers.
- Political problems and strikes in Poland caused some buyers to come to the U.S. to replace - on a short term - coal perceived to be unavailable from Poland. In fact, Poland's exports will be cut by over 4 million tons in 1980; 1981 levels are also likely to be lower.
- Total coal use at steel mills has actually increased as the steel industry cut the amount of oil used to fuel its furnaces from a 20-80 oil-coal mix to 100 percent coal.

. Overseas shipments of steam coal will increase from 2½ million tons in 1979 to 13 million tons this year. Most of this steam coal has gone to Europe. Why? Oil prices have increased beyond the point where the use of coal is more economical than continued use of oil, thus European countries are converting existing coal capable electric generating units from oil back to coal. Coal is also needed for new generating units coming on line this year and next and for some industrial uses. Demand for steam coal from the United States has also

been affected, but to a lesser degree, by the aforementioned strikes.

Other factors have contributed to the 1980 increase in demand for U.S. coals including:

. Availability of competively priced U.S. coals due to the overproductive capacity of the industry.

. High cost European coal production which has not kept pace with EEC coal demand forcing a sharp increase in imports.

. South Africa which has apparently fully committed its currently available export capabilities.

. Freight rate differentials have made U.S. coal more attractive in Europe.

This record year has not been without some record short term problems, not in the production of coal but in the transporting of coal and movement of coal through our port systems. As a result of inadequate port facilities we do have congestion on the east and gulf coasts. Wait time to load vessels can be as much as 35 days; additional demurrage costs are running as high as $10-$12 per ton quickly eliminating any cost advantage the United States has.

The reasons for the congestion problems - which are not unique to the United States - are these:

- the sharp increase in demand for both met coal and for steam coal which has already been discussed.
- an influx of a large number of new and inexperienced buyers and exporters.
- coal deepening, handling and back up facilities which were designed to handle smaller volumes of met coal not the tonnages we are trying to export in 1980.

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- unavailability of ground storage facilities

As discussed many times, these problems could, if not resolved, adversely affect the long term outlook for our coals abroad.

In the longer run, the solution is obvious - build new modern port facilities, make the harbor improvements necessary to handle larger, more cost effective vessels. These longer range options are discussed in a companion paper.

But in the short term, we must work with the physical port capacity we have -- and some very ingenious methods have been found to increase that capacity to the maximum.

Over the past months-

- Chessie has reopened pier 15 at Newport News
- N&W has begun operating pier 5 at Hampton Roads on a full time basis
- Chessie has started to use lay berth facilities in Baltimore to cut down on vessel turnaround time.
- Chessie has instituted a new technique of loading coal from barges onto oceangoing vessels thus increasing Curtis Bay capacity by over 250,000 tons a month.
- Conrail has finished a short range improvement of Pier 124 in Philadelphia - this has, I might add cut the wait time into less than 7 days at last count.
- Shipments have been diverted to New Orleans - where exports have gone from less than 1½ million tons in 1979 to over 4½ this year.

(Parentheically Chessie's recent action, publishing favorable rail rates to river terminals for coal for export will add

appreciably to New Orleans beusines next year. According to our figures, coal from West Virginia can move down the Ohio River to New Orleans and be put on a vessel competitively with an all rail shipment through Hampton Roads as long as vessel demurrage is $5 per ton or more. For a 50,000 dwt vessel paying $15,000 per day, this is about a 17 day wait.)

- Minimal shipments have gone through the ports of Galveston and Port Arthur, Texas and New York.
- Finally, close to one million tons should go to Japan from Los Angeles, Long Beach, in 1980.

1981 will see a continuation of these interim measures. Next year, there will also be some shipments going overseas which have originated from Great Lakes ports. At first thought this seems an expensive option - and it is unless you are paying $8-$10 a ton or more in vessel demurrage. The unit train rail to Toledo or other Great Lakes ports combined with transfer at the port of $5; lake vessel charge - on barge or lake collier through the Welland Canal to Quebec, of $8; transfer at Quebec to an oceangoing vessel which can be 150,000 dwt of $2.70., results in a $20-$28 plus transportation cost to reach Quebec. This is partially offset by lower cost of using a 150,000 dwt vessel.

These short term measures will help increase dumping capacity in the short term. In fact, their effects are already helping as shown by the fact that the annualized rate of loading in the third quarter 1980 was over 84 million tons, well above the 57 million ton rate of the first quarter. But despite increased loadings, we do not expect the vessel backup to disappear in 1981. It will, however, get better at some piers in part because the demand will

be relatively flat in 1981. Our initial forecast for 1981 shows that steam coal will increase from 13 million to nearly 20 million tons, but that met coal demand will drop from 57 million to 50 million - for a net gain of zero.

In 1982, however, a further increase in steam coal shipments will more than outweigh any fluctuation in met coal shipments and will make planned new facilities on all coasts necessary.

Long Range Outlook for Coal Exports

1980 is not a false alarm. Demand for U.S. coals for export will not experience the same declines as experienced in the 1970's because the new demand is for steam coal not metallurgical coal.

A. The Outlook for World Coal Use. Coal is the economical fuel choice of the future and it will supply a greater percentage of world energy requirements in the next decade than has been the case in the last 10-15 years. For example, in O.E.C.D. countries, coal supplied less than 20 percent of energy used in 1977, but various forecasts show that coal is expected to supply 22-24 percent by 1990, and could supply as much as 30 percent by 2000. Centrally Planned Economies coal, which supplies some 50 percent of energy requirements at the current time, is expected to maintain if not increase market share.

The rate of increase in coal consumption will thus be sharply higher than the rate of increase in overall energy use. This is due primarily to decline in oil use because of higher oil prices and uncertainty as to oil supply and availability, and also due to lower than expected growth in nuclear power generation.

In terms of tonnages the World Coal Study has forecast the OECD coal consumption is expected to increase from approximately just

over 1.1 billion short tons in 1977 to 1.5-1.6 billion short tons in 1985, and from 2.4 to 3.6 billion tons by 2000. This sharp increase in coal use will necessitate an even greater increase in coal trade as nations without coal reserves start to use coal in larger quantities and as nations with only small coal productive capacities begin to use more coal than can be supplied domestically. The same study cited above shows that OECD steam coal imports will increase from 54 million short tons in 1977 to a potential high of over 600 million by 2000. Other countries' requirements will push this total even higher.

Where will this trade take place?

The several assessments of the future world coal market have all concluded that, in the "free" world:

. The principal coal importers are now and will continue to be OECD/Europe and Japan. Korea, Taiwan and the South American nations will also import substantial quantities of coal in the next decade.

. The principal coal exporters are, and will continue to be the United States, Australia, Canada and South Africa although not necessarily in that order. Poland will play an as yet undetermined role in supplying coal to O.E.C.D. nations; the U.S.S.R. and China may supply significant quantities to Japan, Korea and Taiwan in the late 1980's and into the 1990's, but their supply capabilities are indeterminate at this point.

B. The United States as a Potential Coal Supplier.

We fully expect that U.S. exports of steam coal for power generation and steam coal for industrial use will increase sharply in the 1980's. Metallurgical coal exports, long responsible for the United States' dominant position in the world coal market, will likely continue at approximately current levels although the long-range growth potential in this market is limited.

The U.S. has comparative advantage over many other coal producing countries, including advantages of:

- A coal reserve base large enough to support substantial increases in domestic coal use as well as exports without substantially affecting the price of coal.
- An established, highly competitive coal industry large enough to assure the continued availability of coal for long term, large quantity requirements.
- A potential for relative price stability, depending upon government policies as discussed later in this statement.
- Long term national political stability.

Our forecasts show that coal exported overseas should reach 90 million tons by 1985 and 120-150 million tons by 1990. Met coal exports will remain at 45-50 million tons throughout the 1980's indicating the real growth market in steam coal.

These forecasts are dependent on many variables including the demand for energy worldwide and the speed with which generating capacity is shifted to coal. But there are constraints in the growth of the U.S. potentials including:

. Inadequate port and transportation facilities to handle even today's export demand which we have discussed.

. The comparative delivered cost of U.S. coal versus coals from competing sources.

. The very real concern on the part of foreign consumers that the U.S. would embargo coal exports.

Underlying all these inter-related factors is the constraint which could be called market uncertainty. Worldwide, coal's future is bright, but the rate of growth in demand for steam coal is uncertain. In particular, this depends on the capability to address environmental concerns, the rate of growth in electricity demand and nuclear capacity and, of course, the rate at which the coal production, use and transportation infrastructure can be built. The foreign customer is intereste in a secure supply of coal at a reasonable delivered price. The coal producers, exporters and transporters are interested in long term market certainty to justify, profitably, the massive investments needed to support a large increase in the export market.

Constraints on ports and transportation facilities have already been discussed but I would like to underscore the fact that any action by private sector or the government to increase costs has the possibility of reducing the U.S. market share abroad. The bottom line that determines whether or not the United States will make the sale is the competitiveness of our product - the cost of the Btu's delivered overseas.

The final concern, and one which limits the unwillingness of the potential customer to enter into necessary long term contracts is the concern on the part of the customer that the U.S. will embargo or limit coal exports. This concern stems from actions taken by the government to limit soybean exports and more recently grain shipments to the Soviet Union.

As you are aware, the United States is signatory to several international agreements which conclude that coal use must be expanded worldwide. Included are:

- The IEA Ministerial Agreement on Principles for Coal Action and the IEA Coal Industry Advisory Board which was formed as part of that agreement.
- The 1979 communique signed at the Tokyo Economic Summit agreeing that coal use and trade should be expanded.
- The 1980 communique signed at the Venice Economic Summit which said in part that

> "Together we intend to double coal production and use by 1990. We will encourage long term commitments by coal producers and consumers. It will be necessary to improve infrastructures in both exporting and importing countries as far as is economically justified to ensure the required supply and use of coal. We look forward to the recommendations of the International Coal Industry Advisory Board. They will be considered promptly."

But some customers believe that these declarations are not enough and are continually looking for assurances from the Administration and the Congress that their coal supplies are certain.

Appended to this statement are several tables which describe, statistically, the history of coal exports experience in coal supply and demand in major customer areas and our forecasts for the future.

EXPORTS OF COAL FROM THE UNITED STATES
AS COMPARED WITH TOTAL
COAL PRODUCTION, 1960-1980
(000 Net Tons)

Year	U.S. Exports of Bituminous Coal			Total Coal Production	Coal Exports as % of Coal Production
	Canada	Overseas	Total		
1960	11,639	24,902	36,541	415,512	8.8
1961	11,169	23,801	34,970	402,977	8.7
1962	11,410	27,004	38,413	422,149	9.1
1963	13,762	33,316	47,078	458,928	10.3
1964	14,187	33,782	47,696	486,998	9.9
1965	15,661	34,521	50,181	512,088	9.8
1966	15,829	33,474	49,302	533,881	9.2
1967	15,308	34,220	49,528	552,626	9.0
1968	16,748	33,889	50,637	545,245	9.3
1969	16,789	39,446	56,234	560,505	10.0
1970	18,673	52,270	70,944	602,932	11.8
1971	17,565	39,068	56,633	552,192	10.3
1972	18,161	37,836	55,997	595,386	9.4
1973	16,231	36,639	52,870	591,738	8.9
1974	13,706	46,220	59,926	603,406	9.9
1975	16,735	48,933	65,669	648,438	10.2
1976	16,497	42,908	59,406	678,685	8.8
1977	17,166	36,521	53,687	691,344	7.8
1978	15,239	24,586	39,824	665,127	6.0
1979	19,158	45,624	64,782	776,299	8.3
1980 (e)	19,000	70,000	89,000	830,000	10.7

(e) Preliminary NCA estimates.

Note: Bituminous and lignite production. Exports, bituminous coal only.

Source: 1960-1979 - Department of Energy (formerly U.S. Bureau of Mines, Department of Interior).

UNITED STATES EXPORTS OF BITUMINOUS COAL, BY MAJOR AREA OF DESTINATION, 1960-1980
(000 Net Tons)

Year	Total United States Exports of Bituminous Coal	Bituminous Coal Exports to: Canada		EEC 1/		Total Europe 2/		Japan		Other 3/	
		Quantity	% Total	Quantity	% Total	Quantity	% Total	Quantity	% Total	Quantity	% Total
1960	36,541	11,639	31.9%	14,243	39.0%	16,948	46.4%	5,617	15.4%	2,337	6.4%
1961	34,970	11,169	31.9	13,123	37.5	15,274	43.7	6,610	18.9	1,917	5.5
1962	38,413	11,410	29.7	15,871	41.3	18,284	47.6	6,465	16.8	2,254	5.9
1963	47,078	13,762	29.2	21,864	46.4	25,218	53.6	6,053	12.9	2,045	4.3
1964	47,696	14,187	29.7	21,441	45.0	25,092	52.6	6,514	13.7	1,903	4.0
1965	50,181	15,661	31.2	21,629	43.1	24,957	49.7	7,491	14.9	2,072	4.1
1966	49,302	15,829	32.1	19,635	39.8	22,987	46.6	7,791	15.8	2,695	5.5
1967	49,528	15,308	30.9	16,556	33.4	19,361	39.1	12,215	24.7	2,644	5.3
1968	50,637	16,748	33.1	12,209	24.1	15,402	30.4	15,822	31.2	2,665	5.3
1969	56,234	16,789	29.9	12,032	21.4	15,088	26.8	21,367	38.0	2,990	5.3
1970	70,944	18,673	26.3	16,636	23.4	21,504	30.3	27,636	39.0	3,131	4.4
1971	56,633	17,565	31.0	12,774	22.6	16,403	29.0	19,705	34.8	2,960	5.2
1972	55,997	18,161	32.4	13,482	24.1	16,678	29.8	18,038	32.2	3,120	5.6
1973	52,870	16,231	30.7	10,718	20.3	14,252	27.0	19,190	36.3	3,197	6.0
1974	59,926	13,706	22.9	12,956	21.6	15,855	26.5	27,346	45.6	3,019	5.0
1975	65,669	16,735	25.5	14,675	22.3	18,971	28.9	25,423	38.7	4,540	6.9
1976	59,406	16,497	27.8	15,200	25.6	19,786	33.3	18,803	31.7	4,320	7.3
1977	53,687	17,166	32.0	11,274	21.0	14,914	27.8	15,861	29.5	5,746	10.7
1978	39,825	15,239	38.3	7,986	20.1	10,449	26.2	10,083	25.3	4,054	10.2
1979	64,783	19,158	29.6	18,070	27.9	22,744	35.1	15,669	24.2	7,212	11.1
1980 (9 Mos.)	63,603	12,643	19.9	23,273	36.6	29,002	45.6	15,814	24.9	6,144	9.7

Note: Bituminous coal only.

1/ Adjusted to include exports to the current seven EEC countries during all years.
2/ Includes EEC.
3/ Includes Central America, South America, Asia (except Japan) and Africa.

Source: 1960-1979 - Department of Energy (formerly U.S. Bureau of Mines, Department of Interior).

Type of Coal U.S. Exported Overseas

Exports Overseas	Steam Coal	Met Coal	Total
	(Million Tons)		
1970	5.4	46.9	52.3
1975	4.5	44.4	48.9
1979	2.5	43.1	45.6
1980	13.0	57.0	70.0

1976-1979
EUROPEAN ECONOMIC COMMUNITY
SELECTED COAL STATISTICS
(000 Metric Tons)

Country Hard Coal Production	1976	1977	1978	1979	% Change 1979/1976
West Germany	96,324	91,310	90,104	93,312	- 3.1
France	21,879	21,294	19,690	18,611	- 14.9
Belgium	7,238	7,068	6,590	6,125	- 15.4
United Kingdom	122,202	120,674	121,695	120,637	- 1.3
Ireland	-	54	32	63	-
Total EEC	247,693	240,401	238,111	238,748	- 3.6
Deliveries to Power Stations					
West Germany	34,018	32,104	37,379	39,567	+ 16.3
France	19,013	21,095	23,112	25,166	+ 32.4
Italy	1,179	1,823	1,971	3,170	+ 168.9
Netherlands	880	1,214	1,121	1,148	+ 30.5
Belgium	3,037	4,014	3,698	4,597	+ 51.4
United Kingdom	79,705	79,740	81,911	86,274	+ 8.2
Ireland	50	39	30	47	- 6.0
Denmark	3,371	4,626	5,366	6,552	+ 94.4
Total EEC	141,253	144,655	154,588	166,521	+ 17.9

Deliveries to Coking Plants

	1976	1977	1978	1979	% Change 1979/1976
West Germany	40,947	32,758	32,758	34,070	- 16.8
France	14,765	12,985	12,985	14,549	- 1.5
Italy	10,703	10,006	10,006	9,889	- 7.6
Netherlands	3,546	3,271	3,271	3,588	+ 1.2
Belgium	8,469	7,221	7,221	8,463	-
United Kingdom	21,330	16,338	16,338	17,065	- 20.0
Total EEC	99,760	88,474	82,579	87,624	- 12.2

Deliveries to Industry, Households and Miners' Coal

West Germany	9,105	8,907	8,665	9,284	+ 2.0
France	6,486	6,067	6,002	5,925	- 8.6
Italy	412	676	460	1,056	+156.3
Netherlands	284	185	273	220	- 22.5
Belgium/Luxembourg	2,809	2,838	3,273	2,301	- 18.1
United Kingdom	21,490	22,177	20,747	21,726	+ 1.1
Ireland	522	714	761	1,140	+118.4
Denmark	586	721	768	775	+ 32.3
Total EEC	41,694	42,285	40,949	42,427	+ 1.8

Total EEC

Total Deliveries	282,707	275,414	278,116	296,572	+ 4.9
Required from Non-EEC Countries	35,014	35,013	40,005	57,824	+ 65.1

EEC COAL IMPORTS FROM NON-EEC SOURCES
1976-1979
(000 Metric Tons)

Imports From:	1976	1977	1978	1979	% Change 1979/1976
Canada	641	889	908	907	+ 41.5
Australia	4,485	6,696	6,677	7,995	+ 78.3
South Africa	7,652	7,840	10,682	15,924	+ 108.1
Poland	16,044	14,777	15,289	15,292	- 4.7
U.S.S.R.	4,086	4,163	3,281	2,787	- 31.8
United States	14,239	10,707	7,486	14,691	+ 3.2
Other	3,401	908	1,012	1,521	- 55.3
Total	43,746	45,980	45,335	59,117	+ 35.1

EEC COAL PRODUCTION, DELIVERIES
IMPORTS, JANUARY-MAY
1980 vs. 1979
(000 Metric Tons)

	January-May 1979	January-May 1980	Percent Change
Production	103,154	106,397	+ 3.1
Deliveries to:			
Power Stations	65,203	74,871	+ 14.8
Coke Plants	36,005	36,505	+ 1.4
Industry	9,515	9,363	- 1.6
Retail	8,577	7,916	- 7.7
Total Deliveries	119,300	128,655	+ 7.8
Imports from:			
Canada	314	175	- 44.3
Australia	3,771	3,763	- 0.2
South Africa	5,352	7,472	+ 39.6
Poland	6,964	6,870	- 1.3
U.S.S.R.	1,059	1,114	+ 5.2
United States	4,983	9,909	+ 98.9
Other	1,620	517	- 68.1
Total Imports	20,823	29,820	+ 43.2

RECENT HISTORY OF COAL CONSUMPTION AND PRODUCTION
(MILLION TONS)

	1977 A/	1978 A/C/	1979 A/	Est. 1980 B/
CONSUMPTION				
Domestic Consumption				
. Electric Utilities	475.7	480.2	526.0	565
. Coking Coal	77.4	71.1	77.0	73
. General Industry & Retail	67.4	70.1	74.3	77
Total domestic consumption	620.5	621.3	677.2	715
Exports				
. Canada (about ½ met, ½ steam)	17.2	15.2	19.1	19
. Overseas (primarily met)	36.5	24.6	45.6	65
Total exports	53.7	39.8	64.7	84
Total Consumption - U.S. Coal	674.2	661.1	741.9	799
SUPPLY				
U.S. Production				
. East	527.4	469.0	554.9	580
. West	163.9	184.8	221.4	245
Total U.S. Production	691.3	653.8	776.3	825
Imports				
. Steam Coal	1.8	3.0	2.1	
. Coke	1.8	5.3	4.0	

A/ U.S. Dept. of Energy latest estimates

B/ NCA Economics Committee estimates

C/ 1978 demand and U.S. Production were depressed due to coal and rail strikes.

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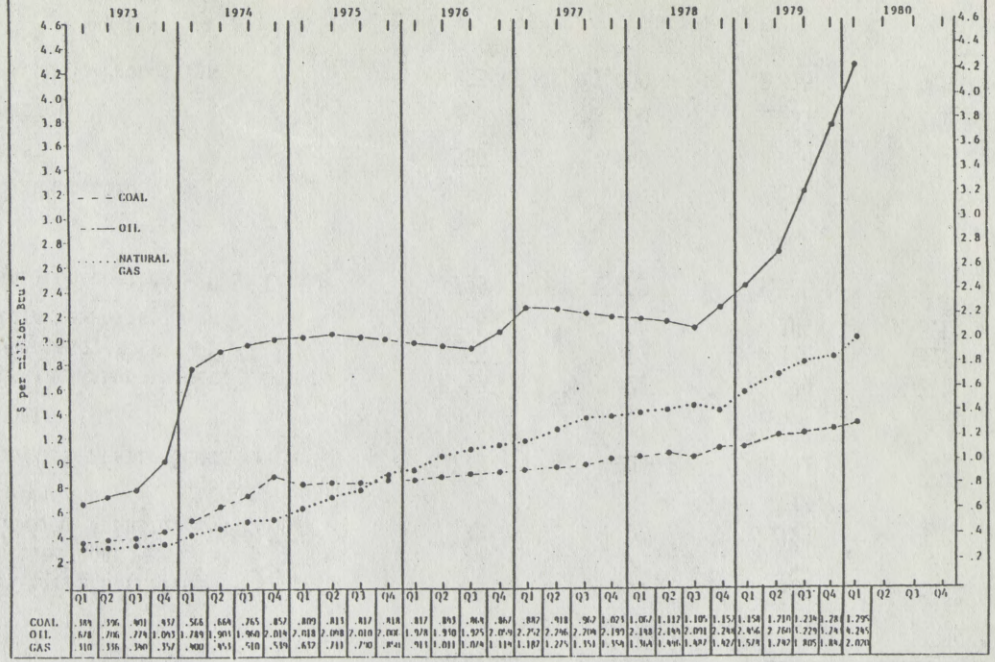
COAL-SUPPLY DEMAND
1985 AND 1990

	Estimated	Forecast		Average Annual Growth Rate
	1980	1985	1990	1980-1990
		(Million Tons)		
CONSUMPTION				
Domestic Consumption				
. Electric Utilities	565	733	959	5.4%
. Coking Coal	73	75	75	-
. General Industry & Retail	77	97	125	5.0
. Synfuels	-	-	12	-
Total Domestic Consumption	715	905	1,171	5.1%
Exports				
. Canada (about ½ met, ½ steam)	19	22	24	2.4
. Overseas	65	82	120	6.3
Total exports	84	104	144	5.5
Total Consumption - U.S. Coal	799	1,009	1,315	5.1
SUPPLY				
U.S. Production				
. East	580	649	790	3.1
. West	245	360	525	7.9
Total U.S. Production	825	1,009	1,315	4.8

COMPARISON OF DELIVERED PRICE FOR COAL, OIL AND NATURAL GAS USED BY UTILITIES

In $ per million Btu's - From 1973 to 1980 (Nationwide averages)



	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
COAL	.389	.396	.401	.417	.566	.668	.765	.857	.809	.813	.817	.818	.817	.893	.968	.967	.882	.918	.962	1.025	1.067	1.117	1.105	1.157	1.158	1.210	1.234	1.281	1.299			
OIL	.678	.706	.774	1.043	1.789	1.901	1.960	2.014	2.018	2.098	2.010	2.002	1.978	1.910	1.935	2.059	2.272	2.296	2.204	2.197	2.148	2.189	2.091	2.298	2.456	2.760	2.729	2.743	2.945			
GAS	.510	.536	.540	.557	.900	.955	.510	.539	.632	.713	.740	.824	.911	1.011	1.074	1.134	1.187	1.275	1.353	1.354	1.368	1.446	1.437	1.427	1.578	1.747	1.805	1.844	2.026			

NOTES: . The figures shown are nationwide averages for fuel delivered to utilities. Prices may be substantially higher or lower in particular areas and for fuels of particular kinds or qualities.

. The figures shown include the costs of transportation (which have been going up rapidly for coal) but do not include the costs of storing or handling the fuel after delivery, or the capital and operating costs (including pollution control) for the powerplants. Normally, these costs are higher for coal than oil or natural gas.

. Source: FERC Form 423

NATIONAL COAL PRODUCTION CAPACITY ADDITIONS
(Increments Over 1978 Production in Million Tons)

	1980	1985	1990
	(Million Tons)		
By Region			
Appalachia	79.43	155.15	142.18
Midwest	25.08	45.83	39.33
Northern Great Plains	83.26	295.82	414.47
West	39.15	153.62	195.46
By Method of Mining			
Surface	133.63	449.19	587.25
Deep	93.29	201.23	204.15
By Principal Market			
Steam	197.62	589.26	729.56
Metallurgical	29.29	61.15	61.84
TOTAL	226.91	650.40	791.39

Source: ICF Inc.

Demonstrated Coal Reserve Base
(Billion Tons)

	Potential Underground	Potential Surface	Total
Appalachian 1/	91.8	20.0	111.8
Illinois Basin 2/	70.6	20.6	91.1
Midwest 3/	4.6	8.7	13.3
West 4/	130.0	92.0	222.0
TOTAL	297.0	141.3	438.3

1/ Included all states in Appalachian area.

2/ Illinois, Indiana, West Kentucky.

3/ Iowa, Kansas, Missouri, Arkansas, Texas.

4/ All Mountain states, includes North Dakota.

Demonstrated Remaining Coal Reserves of the United States by Sulfur Content, and State, on January 1, 1974

(Million Short Tons)

	Sulfur Range Percent					Sulfur Range Percent				
	1.0 or less	1.1-3.0	over 3.0	Unknown	Total[1]	1.0 or less	1.1-3.0	Over 3.0	Unknown	Total
	Underground					Surface				
Alabama	589.3	1,016.7	14.8	178.2	1,798.1	35.4	83.2	1.6	1,063.2	1,183.7
Alaska	4,080.8	163.2	.0	.0	4,246.4	7,377.6	21.0	.0	.0	7,399.0
Arizona	---	---	---	---	---	173.3	176.7	.0	.0	350.0
Arkansas	43.3	310.3	29.2	19.1	402.4	37.9	152.8	17.1	55.2	263.3
Colorado	6,751.3	640.0	47.3	6,547.3	13,999.2	724.2	146.2	.0	.0	870.0
Georgia	0.3	.0	.0	0.2	0.5	---	---	---	U	---
Illinois	1,034.7	5,848.4	33,647.6	12,908.4	53,441.9	60.4	1,493.0	9,321.3	1,347.8	12,222.9
Indiana	443.5	2,746.6	4,355.1	1,402.5	8,948.5	105.3	559.2	907.3	101.6	1,674.1
Iowa	1.5	226.7	2,105.9	549.2	2,884.9	---	---	---	U	---
Kansas	---	---	---	---	---	.0	309.2	695.6	383.2	1,388.1
Kentucky, East	5,042.7	2,391.9	212.7	1,814.0	9,466.5	1,515.7	929.9	86.8	915.3	3,450.2
Kentucky, West	.0	386.6	7,226.4	1,107.1	8,719.9	0.2	177.8	2,017.5	1,708.8	3,904.0
Maryland	106.5	623.9	171.2	.0	901.9	28.6	66.6	16.2	34.6	146.3
Michigan	4.6	84.9	20.8	7.0	117.6	.0	0.5	0.1	.0	0.6
Missouri	.0	134.2	3,590.2	2,350.5	6,073.6	.0	47.8	1,635.8	1,730.0	3,413.7
Montana	63,464.2	1,939.8	456.2	.0	65,834.3	38,182.4	2,175.2	46.4	2,166.7	42,561.9
New Mexico	1,894.3	214.1	0.9	27.5	2,136.5	1,681.0	579.3	.0	.0	2,258.3
North Carolina	.0	.0	.0	31.3	31.3	.0	.0	.0	0.4	0.4
North Dakota	---	---	---	---	---	5,389.0	10,325.4	268.7	15.0	16,003.9
Ohio	115.5	5,449.9	10,109.4	1,754.1	17,423.3	18.9	991.0	2,524.9	117.9	3,653.9
Oklahoma	154.5	238.5	202.6	264.3	860.1	120.5	88.1	38.8	186.2	434.1
Oregon	1.0	.0	.0	.0	1.0	0.5	0.3	.0	.0	0.8
Pennsylvania	7,179.7	16,195.2	3,568.1	2,864.8	29,819.2	138.6	718.4	231.5	89.5	1,181.4
South Dakota	---	---	---	---	---	103.1	287.9	35.9	1.0	428.0
Tennessee	139.3	370.0	101.4	53.9	667.1	65.5	163.2	55.2	34.1	319.6
Texas	---	---	---	---	---	659.8	1,884.6	284.1	444.0	3,271.9
Utah	1,916.2	1,397.6	6.8	460.3	3,780.5	52.3	149.1	42.6	18.0	262.0
Virginia	1,728.5	945.4	12.0	283.3	2,970.7	411.6	218.1	2.1	46.7	679.2
Washington	431.0	957.8	13.2	42.9	1,445.9	172.5	307.7	25.8	2.2	508.1
West Virginia	11,086.6	12,583.4	6,552.9	4,142.9	34,377.8	3,005.5	1,422.8	270.4	509.6	23,845.3
Wyoming	20,719.5	4,535.1	1,275.6	2,955.0	29,490.8					
Total[1]	126,928.8	59,400.2	73,720.2	39,761.8	299,839.7	73,252.3	33,597.4	18,950.9	11,076.1	136,885.7

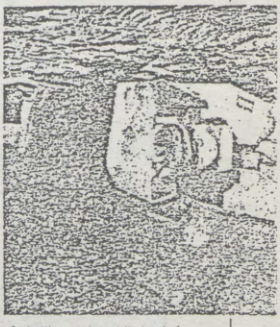
Demonstrated Coal Reserve (Continued)

(Millions of Net Tons)

	Sulfur Range Percent				
	1.0 or less	1.1-3.0	Over 3.0	Unknown	Total
	Total Underground and Surface				
Alabama	624.7	1,099.9	16.4	1,239.4	2,981.8
Alaska	11,458.4	184.2	.0	.0	11,645.4
Arizona	173.3	176.7	.0	.0	350.0
Arkansas	81.2	463.1	46.3	74.3	665.7
Colorado	7,475.5	786.2	47.3	6,547.3	14,869.2
Georgia	0.3	.0	.0	0.2	0.5
Illinois	1,095.1	7,341.4	42,968.9	14,256.2	65,664.8
Indiana	548.8	3,305.8	5,262.4	1,504.1	10,622.6
Iowa	1.5	226.7	2,105.9	549.2	2,884.9
Kansas	.0	309.2	695.6	383.2	1,388.1
Kentucky, East	6,558.4	3,321.8	299.5	2,729.3	12,916.7
Kentucky, West	0.2	564.4	9,243.9	2,815.9	12,623.9
Maryland	135.1	690.5	187.4	34.6	1,048.2
Michigan	4.6	85.4	20.9	7.0	118.2
Missouri	.0	182.0	5,226.0	4,080.5	9,487.3
Montana	101,646.8	4,115.0	502.6	2,166.7	108,396.2
New Mexico	3,575.3	793.4	0.9	27.5	4,394.8
North Carolina	.0	.0	.0	31.7	31.7
North Dakota	5,389.0	10,325.4	268.7	15.0	16,003.0
Ohio	134.4	6,440.9	12,534.3	1,872.0	21,077.2
Oklahoma	275.0	326.6	241.4	450.5	1,294.2
Oregon	1.5	0.3	.0	.0	1.8
Pennsylvania	7,318.3	16,913.6	3,799.6	2,954.2	31,000.6
South Dakota	103.1	287.9	35.9	1.0	428.0
Tennessee	204.8	533.2	156.6	88.0	986.7
Texas	659.8	1,884.6	284.1	444.0	3,271.9
Utah	1,968.5	1,546.7	49.4	478.3	4,042.5
Virginia	2,140.1	1,163.5	14.1	330.0	3,649.9
Washington	603.5	1,265.5	39.0	45.1	1,954.0
West Virginia	14,092.1	14,006.2	6,823.3	4,652.5	39,589.8
Wyoming	33,912.3	14,657.4	1,701.1	3,060.3	53,336.1
Total[1]	200,181.1	92,997.6	92,671.1	50,837.7	436,725.4

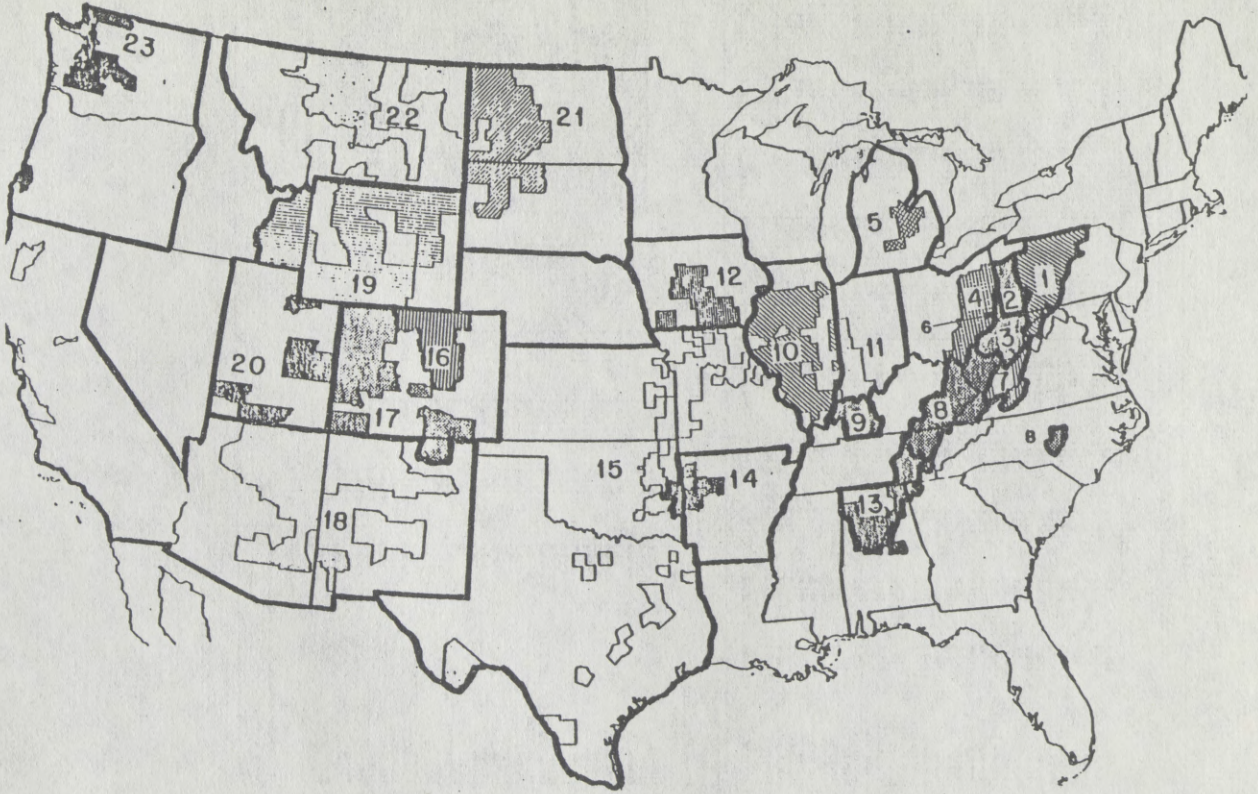
[1]Data may not add to totals shown due to independent rounding.

U Undetermined



A shuttle car dumps its load of coal into a feeder bin, the first step in transporting coal from an underground mine.

U.S. Bureau of Mines Production Districts



Mr. FLORIO. Thank you very much.
Perhaps the representative from Y&O might go forward.

STATEMENT OF ROBERT E. DAIGNAULT

Mr. DAIGNAULT. Thank you, Mr. Chairman.

My name is Robert Daignault, I am marketing manager at the Youghiogheny & Ohio Coal Co., in St. Clairsville, Ohio.

I have been in the coal industry in various positions in planning and economics and marketing for approximately 10 years.

I am a member of the National Coal Association Economics Committee, and am also chairman of the Long-Range Forecast Subcommittee of that Committee, and I would like to say that I concur with Ms. Holmes remarks about the firmness of the future long-range market for U.S. coals overseas, if we can in fact move the coals overseas.

Y&O Coal Co., has been in business for approximately 78 years, and we own approximately one-half a billion tons of coal reserves in Ohio, West Virginia and Pennsylvania. In West Virginia, the reserves are leased to another company, the Pennsylvania reserves are undeveloped. In southeastern Ohio, we have three deep mines, each capable of producing approximately 1 million tons per year. However, due to the implementation of what we feel are rather strict sulfur dioxide standards in Ohio and Michigan the natural or traditional market for Ohio coal has been taken away from us.

Currently, two of our operations are closed on a standby basis, and the other mine is operating at about 60 percent of capacity.

In Ohio, our company is not alone in our plight—about 10 years ago, Ohio coal producers were mining 55 million tons a year out of the U.S. production of approximately 600 million tons.

In 1980, Ohio producers will mine only 42 million tons of coal, despite the fact that U.S. coal production has risen 230 million tons to approximately 830 million tons this year.

Now, when we saw that our market here in the United States for Ohio coal was being taken away from us, we went looking for other markets, and one of the markets that we foresaw as increasing in the future, was the steam coal export market. So at that time, about 1 year ago—even though we were not exporting coal—we applied for membership in the Coal Exporters Association, and were accepted as members.

I'd like to direct the rest of my comments [see p.38] to why I feel that we, as Ohio coal producers, and any other Ohio coal producer that I know of, have not been able to participate in this export market, even though, as someone said, it has increased 40 to 50 percent this year.

Because of our location, we are at a transportation cost disadvantage, no matter which way we want to move to U.S. ports. If we go to the east coast, by rail, we are at a disadvantage cost wise, with coals from West Virginia or Pennsylvania.

If we want to move to the ports of the gulf coast, we are at a transportation disadvantage with coals from the Illinois basin. The quality of our coal is, as Congressman Brown said, it is a high quality, high

Btu coal, but its sulfur content is rather high, so as far as sulfur content, we don't have anything to offer that any other coal producer in Illinois or Pennsylvania has to offer.

We knew those two factors were working against us when we tried to enter the export market, but we looked at this market as a long-term market, and when people are looking to buy coal long term, they are not totally, concerned with price or totally concerned with quality. They are mainly concerned with reliability of supply, backed by substantial reserves.

We thought that that was something that we could offer to an overseas consumer.

We were right, the overseas buyers are interested in long-term supply, and they are interested in reliable suppliers, but we found overseas countries to be very hesitant to enter into long-term agreements.

Substantially—the steam coal export market has been characterized by very short-term arrangements, 1 year contracts or less.

Their main concern is our transportation infrastructure, our ports, our railroads, our waterways. I suppose they are a problem, I'm not sure, and there are a lot of people here today who can speak to that a lot better than I can, but as far as I am concerned, if the customer—the overseas customer that is, thinks the ports are a problem, then they are a problem, and we need to do something about them.

Now, the coordination of all this, of the production in this country, the consumption in foreign countries, the transportation here to the ports, is not an easy thing to get a handle on.

I know one thing—the production problems are not a constraint right now. We have 100, maybe 200 million tons of excess production-capacity in this country. As I said, my own company has 1-million ton a year mines completely closed down, and on a standby basis.

As I said earlier, the consumption problems are not a constraint. The foreign countries, based on my own meetings with these people, and my work on the Long-Range Forecast Subcommittee of the NCA, are interested in consuming coal for a long time to come. They have powerplants under construction, they are going to build more coal fired powerplants.

The problem is right in the middle, it is getting our coal to the ports, moving that coal over the ports.

To Ohio producers the thing that would benefit us most, would be improvements at New Orleans.

I see a real potential there, I've been down there, there is so much space, it is very conducive for moving steam coal. There is plenty of room to put coal on the ground. The problem there is, I think, 21 miles of waterway, known as the southwest pass, where ships are limited, to 45 foot draft, and consequently only the 55,000-ton ships, can get up and load at New Orleans.

If that southwest pass were dredged to 55 feet, the 100,000-ton ships could move in there and make the movement of coal overseas much more competitive.

My point is that as far as a Midwest producer or an Ohio producer is concerned, the only way that we can participate in this market, is for it to be a long-term market, and for the consumers overseas to look at

it as a long-term market. The consumers overseas need some positive reinforcement from the U.S. Congress, from private enterprise in this country, that we are going to do something about the problem, and we are going to modernize our ports and upgrade our railroads and our waterways so that we can supply these countries with coal for 100 years to come.

Thank you.

[Mr. Daignault's prepared statement follows:]

TESTIMONY OF ROBERT E. DAIGNAULT BEFORE THE SUBCOMMITTEE ON TRANSPORTATION AND COMMERCE OF THE COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE DECEMBER 17, 1980

My name is Robert Daignault. I am Marketing Manager of the Youghiogheny and Ohio Coal Company (Y&O) headquartered in St. Clairsville, Ohio. Prior to my arrival at Y&O in May, 1979, I spent approximately nine years with Consolidation Coal Company in Pittsburgh, Pa. and served in various capacities in the computer systems, planning and economics, and marketing departments. I am a member of the National Coal Association's Economics Committee and currently serve as Chairman of that committee's Long-Range Forecast Subcommittee.

The Youghiogheny and Ohio Coal Company, or Y&O, has been in the coal business for 78 years and since 1976 has been a wholly-owned subsidiary of Panhandle Eastern Pipe Line Company. We have extensive reserves of coal in Ohio, Pennsylvania, and West Virginia. The West Virginia reserves are leased to another coal company, and the Pennsylvania reserves are undeveloped. We have three deep mines in southeastern Ohio, each capable of producing one million tons per year of mid to high sulfur steam coal. However, due to the promulgation and implementation of overly stringent SO_2 regulations in Ohio by Federal EPA over the past few years, two of these three mines are shut down, and the third is operating at 50% of capacity. These are unionized, deep mines all within 30 miles of the Ohio River. Two mines are served by Conrail and one by the N&W. We are not alone in our current plight. Ten years ago Ohio was producing 55 million tons or almost 10% of our nation's coal supply. In 1980, Ohio producers will mine roughly 42 million tons or only about 5% of national production.

About a year ago we foresaw a substantial market developing for

U.S. steam coal overseas; and although we were not then engaged in exporting coal, nor are we now, we applied for membership into the Coal Exporters Association of the U.S. and were accepted as members. I would like to direct my comments to why we or any Ohio coal producers, to my knowledge, have not been able to participate in the steam coal export trade except perhaps for one or two small test shipments at distress prices.

Because of its location Ohio coal is at a transportation cost disadvantage no matter how it moves to the export markets. In moving to East Coast ports it incurs higher rail transportation costs than coals from Pennsylvania or West Virginia. In moving to Gulf Coast ports it incurs higher barge transportation costs than Illinois Basin coals. The sulfur content of our coal is as high as most Illinois Basin coals and higher than most coals in Pennsylvania or West Virginia. When we attempted to become a participant in the export market we knew these two factors were working against us, but we felt that due to the impressive growth of coal consumption in the past year and as future prospects for a radical shift by overseas countries from oil to coal intensified, the overseas buyers would be looking to purchase their coal under a long-term agreement where reliability of supply backed up by substantial reserves is most often the major concern of the buyer.

As we have talked with overseas buyers in the past year, we find many countries interested in a long-term coal supply but hesitant to commit to long-term agreements. Their concern is normally an uncertainty over possible logistical bottlenecks--rail, waterways, and ports--in the future. The coordination of the production, transportation, and consumption decisions in order to assure an expansion of U.S. steam coal exports is not an easy process. The production and availability of coal is not a constraint at this time. Coal production

capacity was expanded substantially on the promise of accelaration of U.S. coal use five years ago--a promise that did not materialize. Hence, the substantial current capacity surplus. The long-term consumption decisions have been made in the coal importing countries, but the long-term commitments to U.S. coal are not being made primarily because of a lack of confidence in the ability of our current system to effect a consistent and timely response to solving our infrastructure problems.

Private enterprise has already responded. A number of new or expanded ports are planned at Baltimore, Philadelphia, Hampton Roads, and New Orleans. It is expected that permitting problems will arise in building these new ports. Active interest by Congress and the Administration in the timely resolution of permitting problems will reduce lead times and serve notice to coal importing countries that the U.S. is actively interested in increasing steam coal exports and becoming a reliable supplier on a long-term basis.

A second area where we need help is the modernizing of our ports and harbors to allow the use of larger ships. U.S. ports are shallow in terms of modern world trade requirements, and coal export is only one business which will be constrained by harbors which have not been improved for decades. As an example, at the Port of New Orleans, the Corps of Engineers have stated publicly that the eonomic cost/benefit ratio of dredging the 21 miles of the Southwest Pass to 55 feet shows a 8 to 1 return.

Other speakers, I am sure, will speak to other transportation bottlenecks much more accurately than I can; but I must stress that as far as my company is concerned as an Ohio coal producer, our goal must be to do what we can to make this a long-term market. Today, the

coal export market is a spot market. Much of the coal being offered in this market is bid by brokers representing small operators at very low distress prices. Unfortunately, many of these small operators make commitments that they are unable to deliver upon or commit the same coal to more than one broker. Many times the loading is delayed, or a different coal of different quality is substituted--not a popular practice as far as the buyer is concerned. The result is another black-eye for the U.S. coal industry in world markets.

In summary, the only way for Ohio coal to compete in the world coal market is for that market to become a long-term market. We cannot compete in a spot market where today's lowest delivered price to a port determines the supplier. As I said earlier, Ohio coal has a transportation cost disadvantage versus other coals no matter how it moves to export markets. In a long-term market, the overriding concern of the buyer is reliability of supply. Ohio has many reputable producers with large blocks of proven reserves that can provide that need. That long-term market is lacking, however, because of a lack of confidence by overseas buyers that the U.S. will respond to our transportation infrastructure problems.

RED:mr

Mr. FLORIO. I would like now to hear from the representative of Consolidation Coal Co.

Perhaps if I can suggest shifting places between you gentlemen.

STATEMENT OF EDWARD RUDOLPH

Mr. RUDOLPH. Mr. Chairman, Congressman Brown, my name is Edward Rudolph, and I am the distribution manager for metallurgical and export sales of Consolidation Coal Co.

Consolidation is the large producer of metallurgical and steam coals. This year we expect to produce in the neighborhood of 52 million tons of coal. We plan on exporting in the neighborhood of 6 million tons of coal this year.

In that posture, as a major coal exporter, we are well attuned to the complaints of the world market on the availability of U.S. coals to meet their needs.

The port situations have become overly congested in the past 12 months, and this, I think, is a major concern for the worldwide community, to enter into long-term contracts.

We have repeatedly heard complaints due to the inability to get ships loaded on a timely basis, and we have been requested to divert our energy into exploring any and all possibilities to improve upon this situation, which we have.

One of those is our company's decision to purchase a port facility for the exportation of coal in Baltimore, Md., commonly known as the Canton Marine Terminal.

We expect within the next 2 to 3 years to have this facility opened to handle approximately 10 million tons of export coal.

We are also exploring opportunities to move coal via the Mississippi River, through New Orleans, as well as contemplating potential alternative avenues of exports n the Hampton Roads area.

We are vitally interested in meeting the demand of the worlds coal community.

Basically, we think that the present situation in same part, has been caused by a sudden interest in domestic steam coal on a short-term basis. I think that it became basically unanticipated by the railroads, and the producers as well.

As such, we now do see the 100 or so vessels that have been mentioned here waiting for coal on the east coast ports.

This is not to say though, without due diligence, that this problem could not be overcome. The railroads are presently servicing the ports of Hampton Roads and have explored new practices by which the producer engages with the railroad to develop contract rate for the exportation of coal. We think that this might be advantageous in that it can afford some sort of stability, both to the producer and the railroad, not to mention, at least, the customer in guaranteeing the availability of this coal on a more timely basis.

We think these can be expanded into long-term benefits, as a coordination between our producers, railroads, and ports developed to export this coal.

We have also been investigating and exploring the existing tariffs to determine the economic feasibility of moving coal in direction that have not beeen customarily used.

We think that this would be a matter that would demand immediate attention to coordinate a system of coal movement through—not—noncustomary avenues that are not presently being used.

We think that coal companies from different areas that have not been addressed heretofore, to export destinations, may come under the opportunity to participate. This, of course, is very advantageous to the Ohio producers. If coal can be moved in an economic fashion to the existing river ports, we think that would be a—certainly a very feasible way to include the Ohio producers in the export of coal.

We feel that the demand is there, and if we can coordinate our efforts, I think we can take advantage of this opportunity that presents itself, both in the short term and the long term.

I would like to let my colleague, Mr. Boyle speak more specifically on our operations in the Ohio area.

Thank you.

STATEMENT OF BILL BOYLE

Mr. BOYLE. Hon. Chairman, Hon. Congressman Brown, my name is Bill Boyle, and I am export coordinator for Consolidation Coal Co. in Pittsburgh.

I, for the last 2 years, have been in Ohio sales, of Ohio production based out of Cleveland, I just moved to Pittsburgh 2 weeks ago into the new position, so I am not totally familiar with all the export factors. I do apologize for Mr. Friedrich not being here today. He was involved in some Far East contacts for the last month, and just got back yesterday.

I can address myself, at least, to what Consolidation Coal's production has been in Ohio, and what the problems may be in developing some of the export trade.

In Ohio, we have the Georgetown preparation plant that is the largest wash plant in Ohio, and we produce—we used to produce coal from nine different mines in that area. We are now down to four mines, four deep and strip mines.

The annual production out of Georgetown is 3 million tons per year. With EPA—Federal EPA and Ohio EPA sulfur limitations over the last 10 years, our production has necessarily gone down due to smaller sales.

In Ohio and Michigan, which are the principle markets for that coal, we used to do 10 million tons of business per year in Michigan. We are now down to 3 million tons, and that production now comes out of northern West Virginia mines.

We have no opportunities to sell that coal out of Georgetown up to Michigan because of the sulfur limitations. But in Ohio, we used to sell 9 million tons, and we are now down to 3 million tons per year.

We face much the same situation as Y. & O. Coal Co., which Mr. Daignault addressed.

In a sense, we have had a salvation at Georgetown, because many of the customers in Ohio and Michigan who have faced sulfur restrictions have been able to receive coal from our Champion preparation plant in Pennsylvania, about 14 miles southwest of Pittsburgh.

That has a 2 percent sulfur range. As far as where we are in Ohio and Michigan, and somewhat in Pennsylvania coals, to that market, we are somewhat limited in our flexibility.

Also, in regards to the export market, we have been trying to salvage as many Ohio accounts as we can from the EPA regulations with these other mines, but we have had to reduce our labor force, reduce our number of mines that are open, and reduce our overall production that is going into Georgetown in order to cut costs and stay in the marketplace.

Over the last 2 years that I have been involved in Ohio sales, that is pretty much our market position. It is not a case of expanding your market to other accounts, it is trying to maintain some semblance of a reasonably stable market against low sulfur competition and try and help our customers achieve compliance on many of their regulations.

So I guess as far as the position that we would take now is let's try and hold as many Ohio customers as we can, and try and stave off maybe some more EPA regulations or restrictions on sulfur. And try to develop some of the export trade, if that is possible.

I think that if you are looking at trying to export coal, we—Ed and I have over the last day or so, been looking at some of the factors involved, regarding Ohio production from the Georgetown preparation plant, where we are using 8- and 9-seam coal.

Now, the 8-seam coal is higher sulfur, higher Btu coal, but the 9-seam coal is a lower sulfur, lower Btu coal, and you have to mix those two together in order to come out with a reasonable product that would be in a 2.4–2.5 sulfur range.

In other words, if you have a straight 8-seam coal, you would run, in our case, somewhere between 2.8 to 3 percent sulfur.

If you were looking at the straight No. 9-seam coal, you are looking at a 1.9 to a 2.3. When you mix the two together in a 50/50 ratio, as we're doing now, you can come out with somewhere around 2.5 to 2.6 percent sulfur.

But, what we are trying to say is that we are blending to make and maintain our present customers, but that also has some effect on what we can export. If you are looking at the export trade, the basic sulfur limits that you are looking at is a maximum 1.5–2 sulfur.

If you are looking at mixing a 3 percent sulfur with most of our Ohio reserves, which is the case for other competitors in the Ohio seams, you're having to mix that with an eastern Kentucky coal, and the percentage of Ohio coal you use would have to be probably no more than 33 percent, compared to 75 or whatever percent for an eastern Kentucky or the lower sulfur coal, plus you get into the factors of all the transportation logistics.

Ohio coals have roughly a $7 differential disadvantage from other eastern Kentucky coals that are going to Baltimore right now.

Going to New Orleans, you have got a problem of going onto the river, plus trucking and barge loading charges that also are affecting your cost differentials.

So I think, in another sense, we have some property in Martins Ferry, which we have not developed yet, but we cannot really say well, has the market stabilized enough to justify even putting that property into development.

As we can see now, it doesn't look like we could really say that the potential for Ohio coal—there are a lot of factors that would have to be overcome in order to allow exporting Ohio coals to come of age.

We have our present customers to develop. We have to maintain those customers before we would think of extra production, provided an export market really exists.

Thank you.

Mr. FLORIO. Mr. Tostensen?

STATEMENT OF NEAL TOSTENSEN

Mr. TOSTENSEN. Mr. Chairman and Congressman Brown, as I previously indicated, I am president of the Ohio Mining & Reclamation Association.

The Ohio Mining & Reclamation Association is an organization of over 108 operating coal companies in Ohio, both deep and strip.

I am also chairman of Governor Rhodes Coal Exporting Committee. We have been investigating the possibility of exporting Ohio coal. The reason being, as what has already been specified here, has been the drop of the use of Ohio coal.

The Ohio coal industry is located in southeastern Ohio's 23 counties, approximately.

It is bordered on the Ohio River. In 1970, we produced 55 million tons of coal. In 1977, it was 47 million tons. In 1979, we were down to a little bit below 43 million.

According to my current projections of coal production for the year of 1980, I am afraid that we are going to drop to about 38 million tons.

This has been brought about during the 1970's of the conversion of Ohio industries and our market area, from coal to oil, and from Ohio utilities switching from Ohio coal to low sulfur, compliance coal.

We have the capacity to expand here in Ohio, and this is why I give you this background, but what I would like to relate is that when you look at export, you first have to look at the product of this, which the customer wants.

He is going to be looking at two things, the sulfur content of the coal, and the other criteria, is the cost per million Btu.

In Ohio under current technology, we are not able to do too much with lowering the sulfur of our Ohio coals, because of the geological structure and the fact that Ohio coal is more inherent sulfur as opposed to pyritic.

However, the Ohio coal industry, during the past couple of years, have had more wash plants built in Ohio than in any other single period of time, I think, in the Ohio coal industry history.

What this allows is the preparation of a better coal product than run-of-mine coal. So that Ohio can produce a reasonable product per million Btu for the customer, if you do not consider the sulfur content.

What then would be our problem? Where would we be looking for governmental assistance.

No. 1, the most logical way for Ohio coal is to get it on water, because water is the cheapest form of transportation that we have available today.

To get it on the water, it requires docks along the Ohio River. What we say to the Government is, we need mechanisms to speed up, not only the issuance of permits for building of coal docks, where you first get it off a truck or a rail here in Ohio, but also the processing of improvements of dock facilities that are already in existence like in New Orleans. If the different companies who own facilities there now

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wanted to expand the coal portion of those loading facilities, you are always involved in permits with the Corp of Engineers and other Government agencies.

The time delay that is incurred in dealing with those agencies, sometimes, are enough to cancel the whole contract or the proposed contract.

Another feature that should be looked at, and which is becoming an important part on the Ohio River, is the maintenance of the locks that are currently in existence.

We currently have coal going north and south, up through the Ohio River, going through these docks, and it is very crucial that they be maintained, and so I give a charge to you to keep this in mind as the next session of Congress looks about different features of the budget.

That you do not destroy the existent docks by allowing them not to be maintained.

Another feature, and I think you will probably hear a lot about this, is that in exporting coal, probably the one biggest single factor involved in the whole process, is the cost of transportation.

It has often been said that in the coal industry, that the cost of selling coal really is the cost of transportation.

Everyone is looking, at not necessarily today or 6 months from today or a year from today, but if we make a commitment to convert to coal as a lot of the foreign countries are already in the process of doing, how can we get that coal and keep the costs of transportation as nominal as possible?

One feature that is being looked at, but it is hamstrung currently because of different existing laws, and that is through coal slurry pipelines.

Coal slurry pipelines on a long distance transfer, would in all reality, be the cheapest form of moving coal.

There are even designs of not only moving it across land, but loading ships with a slurry form off the coast of the United States.

This would assist in the harbor development that you could enter and anchor your ship offshore, far enough, take the coal through a slurry process to the ships and load it in that manner.

Ohio, back in the 1950's, was the first State to have a coal slurry pipeline of any major nature that was put in by Consolidation Coal Co. from Cadiz, Ohio to a powerplant east of Cleveland, Ohio.

They proved that coal could be moved in that manner, I think in the long term, as we look at inflation, we have to look at these long-term solutions.

These are things that I think the Government should be looking at, is to enable the private industry to develop coal slurry pipelines for long range movement of coal.

I think some of these features, we would then be able to move more Ohio coal, because the—in the long run, the cost per million Btu of Ohio coal is a very economical source of energy, and the reliance of all of the lower sulfur coals, I think the cost in the long term, and by that I mean less than 10 years even, will greatly increase at a rate much higher than the higher sulfur Ohio coals.

I think if we had the long-range ability on transportation that I have indicated, we would have a tremendous increase in Ohio coal.

Thank you.

[Mr. Tostenson's prepared statement follows:]

Testimony of Neal S. Tostenson, President,
Ohio Mining and Reclamation Association
before the
Sub-committee on Transportation and Commerce
December 17, 1980
Columbus, Ohio

The Ohio Mining and Reclamation Association is a trade association comprised of over 105 operating coal companies in the state of Ohio. The Ohio coal industry is located in approximately 26 counties, from the southern part of Mahoning County, following the Ohio River down to Ironton, Ohio. Ohio coal can be characterized as high-sulfur, steam coal. We do not produce any metallurgical-quality coal. Therefore, in looking at coal exports from Ohio and the likely demand, that demand will come from countries desirous of obtaining coal for steam-generation process heat, as they switch from oil to coal.

The demand for Ohio coal will be limited as to the environmental standards of the receiving countries. The average sulfur content of Ohio coal will be 3 to 3.5%. Therefore the marketplace will be conditioned by several factors.

1. Environmental standards
2. Cost per BTU for compliance level coal being used by the importing country
3. Cost per BTU of Ohio's high-sulfur coal

Many companies and countries are already looking at the blending of Ohio's high-sulfur coals with low sulfur coals to lower the average cost of the end product.

There are two other factors that should be looked at.

1. What is the capacity of Ohio to increase its production.

This is one area in which Ohio is probably ahead of other states. During the past decade, Ohio production has dropped from 55 million tons to approximately 38 million tons in 1980, which is a drop of 5 million tons of our previous low in 1979. The capacity is there to increase Ohio coal production. Many of our underground mines are operating at 50% capacity and several have closed. Ohio could increase this production almost immediately to meet the demand of exports.

2. The other area to be looked at is whether or not the coal has been properly prepared. The feeling of the Ohio coal industry, to properly get into the export market, one should have the capacity to ship a high-quality product. With coal export, the cost of transportation is a prime factor and cost of transportation should not be wasted on ash any more than is reasonably necessary. This is why we must look at each state's ability to properly prepare coal.

Fortunately, in Ohio, over the past couple of years, we have had the installation of more coal washing plants than any other time in Ohio history. Ohio's coal industry will be able to meet any increased demand for coal with high quality, but unfortunately high sulfur, coal.

The transportation of coal from Ohio presents several options. There is the option of transporting to eastern ports by rail. There is also the option to ship north to the Lake Erie ports, and out the St. Lawrence Seaway. The problem of shipping from Ohio in this direction is that there would be a transfer

of coal at the docks on Lake Erie, putting the coal in smaller colleries for shipment up the St. Lawrence, with another change of the coal to larger colleries for shipment overseas.

One factor everyone should look at is minimizing the amount of handling in the transportation process, as each additional handling charge adds to the cost of the coal.

The primary way for Ohio coal to move would be to be barged down the Ohio River to the Mississippi, and loaded out on the coal docks in the New Orleans area. Currently, there is current capacity for handling coal by barge through the New Orleans docks.

Everyone is aware of the problem, however, with the eastern ports, primarily due to the fact that they were allowed to lay idle for several years without improvements.

The problems I anticipate that will develop are as follows:

1. Proper maintainence of the locks on the Ohio River so they are capable of operating at full capacity so the barges can flow through the locks without time delays.

2. As coal export demand increased, the coal docks in New Orleans will not be able to handle this increase. My understanding is that the New Orleans docks are already gearing up to handle the additional coal exports.

3. In any project involving ports, docks, barge sites, there is the involvement of the Federal government and its various agencies and approvals before any improvements can be made. Probably the biggest single deterrent to any program to improve coal exporting is the ability to get governmental approval of any changes necessary on any dock facilities.

The coal industry and the shipping industry are capable of gearing up meet the demand of increased coal exports.

The problems we cannot reliably work out are the problems of government - the problems of approval from various agencies. If anything can be done to expedite this governmental approval system, then it is our feeling that the industries involved will be able to handle the changes necessary to meet the demands of increased coal exports.

As an example, if a particular port facility is to be enlarged to be capable to handle coal, we should be able to get approval from the governmental agencies involved within 45 days so that work can commence almost immediately. This is the biggest constraint in the transportation network that I see.

I would like to bring up one other area of concern and that is the small operators. Many small operators do not have large sales organizations, but are able to produce very competitive coal on a cost per million BTU. It is my feeling that the government should be able to provide a conduit for the flow of information from other countries relative to the demand for coal so that it can be funneled down to small operators who can provide a very economical product for export if they know of the locations of the demands.

I am pleased to have the opportunty to present this information to this Sub-committee and will be happy to provide any additional information you may desire.

Mr. FLORIO. Thank you very much.
Mr. Turner?

STATEMENT OF ROBIN TURNER

Mr. TURNER. Thank you, Chairman Florio and Congressman Brown.

My comments will be rather brief, because obviously many of the things have already been said.

We are a Cleveland based corporation with some 6,000 employees, operating coal mines in Pennsylvania, Ohio, North Dakota, and Texas.

This year we will produce and sell around 13½ million tons.

What has shifted in recent years, is that some 4 million tons of that will be produced in North Dakota, and 4 million tons of production that was previously Ohio production will not be on our balance sheet this year.

We, like most Ohio companies, and really like any coal companies in the country, have as our customers mainly utilities. In 1972, 1973, and 1974, with the first oil embargo, vast facilities to produce coal were built.

In Ohio, our two mining complex's that were started in the early 1970's, cost some $600 million in investment.

This was utility company investment which, in effect, flows to the utility customers in Ohio, adjoining Pennsylvania and wherever the the power goes.

With the new regulations that came out after that, we, and in effect, the consumers of this State and Pennsylvania, end up with the situation where the $600 million to provide them with coal has been spent by their utility, and there is 5 million tons of excess capacity at those coal mines.

We are now looking at some way to export some of it to bring those mines up to what they were built to produce.

This not only would help North American Coal, but it would lower the cost of the fuel to the present utility customer.

A smaller coal company that is independent as we are, has difficulty getting into the export market because of the intangibles.

From everything we have learned or heard of that the United States becomes the coal of last resort on the international market, because of the intangibles such as where the ships are going to be loaded, what it is going to cost, $100 thousand for demurrage at Newport News, and what the costs are. So, the international people shop Australia, and of course, we do better when Poland has a conflict because they are not exporting.

They come to the United States as a last resort because the average cost of exporting our coal is some $5 more per ton than the average from other countries.

So obviously, when you are a smaller coal company, you can ship 1 million tons of coal and have looking at you a liability. You as a smaller company will have to assume the demurrage running well over $100 thousand a ship. Therefore you have a decision to make whether or not it is a wise corporate decision.

I think that we are far behind in facing this problem, as far as export goes. The first oil embargo was in 1974, and the world market started to increase. We're to the place now, where our coal sells for

approximately $1.50 per million, and where the OPEC oil price for oil-fired powerplants is somewhere around $7 per million Btu.

We're even looking at exploring whether we could ship on the great lakes, out of Ashtabula or Cleveland, Congressmen Brown. Connie has been working on that to see if by taking it through the St. Lawrence Seaway, you could do away with the demurrage and in effect schedule it so that you could load and not have to pay it, and whether that's the cheapest way to go.

Obviously you are shipping in smaller barges, and smaller ships overseas.

Thank you.

Mr. FLORIO. Thank you very much.

Mr. Grim?

STATEMENT OF CHARLES GRIM

Mr. GRIM. Thank you. My name is Charles Grim, and I am international coordinator for the Mine Workers.

My comments will also be on the brief side, because most of them that I had have already been said.

I am on the Coal Research and Development Committee for the State of Ohio, and I have been studying and reading all of the reports for several years. I felt a little bit like the truck driver that asked the farmer how to get to Pittsburgh, and the farmer started to tell him to go down this way, go this way, and then he finally said that you can't get there from here.

But after you read a study, you know that we have to get there. The International has come up with a 24-page summary of what they think should be done on coal export, and their concerns were the inadequacies of the port facilities to handle increased coal.

The International also mentions the need for further expansion of the railroad system, and the capabilities to haul both domestic and export coal traffic, and they also have some information here on the inadequate maintenance on the eastern highway system.

I think probably for coal produced in this area, there are many places along the Ohio River where docking facilities—loading facilities could be put in and shipped down the Ohio and the Mississippi and the port at the end of the Mississippi should be deepened, not only to 55 feet, because a lot of the companies are contemplating building coal-fired ships that will require deeper ports than even 55 feet.

And in some reports that you read, the railroads indicate that some ports are being underused.

It all adds up to the fact that ships coming in for coal lose the dollar incentive by the delay of the ship at the shipping place. Additionally hopper cars are tied up at these shipping ports and are used for stockpile.

Maybe you can't blame anybody—any one person, but we are losing our dollar incentive by delays.

I think that has to be addressed because there isn't the market for coal, even some of the high sulfur coal.

Now, here is a study by the railroads that shows U.S. coal ports with ample handling capacity and port development, a key to an overseas coal boom.

There is one here that says they absolutely can't get coal loaded in the wintertime because they have frozen coal.

Here the Government says, blockage of coal exports from Hampton Roads is that many of the ships loaded have to leave without a full load because of the 45-foot channel. Many loaded ships require 55-foot channels.

And it goes on to say that while the Government said Hampton Roads isn't the only port that should be dredged to the 55-foot channel, they argued that it should be given priority because it is now the dominant coal-exporting port in the world.

Just study after study indicates that we have a job that needs to be done, and—that the more coal we can use here and can use overseas, the less dependent we are going to be on the OPEC nations.

Thank you.

Mr. FLORIO. Thank you very much.

Mr. Brown?

Mr. BROWN. I'd like to open with one generalized question for the record, and see if I can get some degree of concurrence out of the panel of experts on production.

There are a number of different characteristics of coal which make it marketable. I think each of you, to one degree or another, addressed that in some detail. But I would list among these, not just the sulfur content or the level of Btu content, but also the moisture in the coal and the ash condition of the coal after it is burned.

Are there other parts of the coal itself that make it different in its desirability?

Mr. GRIM. The flash point is very important to steam combustion coal. It has to burn at the right temperature and in the right amount of time, which makes the coal produced in this area, one of the best steam combustion coals in the world.

Mr. BROWN. From Ohio?

Mr. GRIM. Yes, from Ohio. And the northern panhandle of West Virginia and on over into Pennsylvania.

Mr. TURNER. Congressman, most of Ohio coal is washed, which means the variability of Btu and the variability of ash, and to a small degree, the variability of pyritic sulfur can be controled.

We can wash coal to 2.5, or to 12.5, obviously it becomes more expensive when you do that because you are losing some of the product, the more and more you clean it.

Most of our coal in Ohio is also dried after it is washed. You have to—you get it so wet, so consequently, you can control the moisture somewhat.

Coal is inherently variable as you go through the seam. This is a difficulty when we went to the Federal EPA on 30-day average, and when they had 24-hour averaging. The coal in any coal seam can vary 10 or 15 percent in sulfur content, in ash, and in many things. It wasn't made in a laboratory.

Mr. BROWN. Do you mean 10 or 15 percent of the 2 percent or the 3 percent, whatever the content is?

Mr. TURNER. Upwards, yes, yes.

Mr. BROWN. Let me try to make some generalizations here before I proceed, and see if you would agree with it.

First, the generalization is that western coal, for the most part, and perhaps I stress this to you, Robin, since you have mines in both areas, western coal for the most part has a higher moisture content, a lower Btu content and a lower sulfur content; is that fair?

Mr. TURNER. Yes, and a higher ash content.

Mr. BROWN. And a higher ash content, yes.

That the variation of——

Mr. TURNER. If you could, Congressman, Consolidation operates both places too, they might——

Mr. BOYLE. Excuse me, we have an Emery mine in Utah, as well as some other mines in North Dakota and South Dakota, and we also have one developing in Arizona.

The problem, I think, moreover—and probably Robin would agree with me—is that transportation is a big problem in the West.

Mr. BROWN. Well, I am trying to limit myself to the characteristics of the coal itself.

The reason I asked the question is that I am thinking of the Port of New Orleans. There seems to be some potential for bringing both western coal and Ohio, or Appalachian, coal into the port of New Orleans.

It seems unlikely that you would bring western coal into Hampton Roads or Baltimore. Although it is perhaps not impossible to bring western coals to Quebec because of the lake system.

We'll get to that later on.

But let me try to identify some of the characteristics of coal in this area.

I would ask you if these statistics are roughly correct. You mentioned the variation within seams, but generally Ohio's sulfur content runs what, 3, 3½, 4 percent sulfur content?

Mr. TURNER. The lowest is about 2½ percent, and then you can get to 7 if you go to the—but it averages about 3.5 or 3.

Mr. BROWN. All right, eastern Kentucky coal has a very low sulfur content, 1½ percent?

Mr. TURNER. Or a half, or 1, yes, sir.

Mr. BROWN. Western Kentucky coal is high here, 2½ percent, in that range?

Mr. TURNER. Yes, sir, or over.

Mr. BROWN. Southern Indiana coal, 2 to 2½ percent?

Mr. TURNER. We don't operate there, but that sounds reasonable. It also gets higher as you go on into Illinois and so forth.

Mr. BROWN. All right, southern Illinois coal can vary from 1 percent to over 2 percent?

Mr. TURNER. Three percent.

Mr. BROWN. It is primarily high-sulfur coal, then?

But there is some low-sulfur coal in southern Indiana?

Mr. BOYLE. It's really not.

Mr. TURNER. Indiana—Illinois, they are importing western coal. They do not have what you would consider compliance coal in southern Illinois.

Mr. BROWN. So southern Illinois is high-sulfur content coal, in the 2- or 3-percent range?

Mr. TURNER. Right.

Mr. BROWN. In Pennsylvania, 2 to 2½ percent in some parts, 1 to 1½ percent in the eastern part of Pennsylvania?

Mr. TURNER. It goes up to 3 or 3½, but Pennsylvania has a—well, you're from Pittsburgh—has a wider range then, say, Ohio.

You have sulfur—low sulfur and what you would call medium-sulfur coal.

Mr. BROWN. And Virginia, to the extent, that the coal deposits there are also in the 1½- to 2½-percent range; is that fair?

Mr. DAIGNAULT. One percent or lower.

Mr. BROWN. I wish we had the ability to put together a map that would show where the low-sulfur content coals are, and where the high-sulfur content coals are. Because if there is an advantage to selling high-sulfur content coals, it is the mixing, as you suggested, Mr. Turner. In the mixing of the coals you can get a marketable mixture, of sulfur content, Btu quality, moisture, asg content, flash point, and all the other qualities. It seems to me that that is the trick in getting Ohio high-sulfur content coal into the world marketplace.

The mixing locations then becomes the next question. Do you mix them at the mine site? Obviously that is difficult, because one mine would have a limited variety. So you either mix them in the railroad cars or the barges in shipment, or going onto the boats in shipment, or you mix them at the site from which you transship abroad. Is that a fair summary of the options?

Mr. BOYLE. Congressman, I'm not an expert, but I don't believe that you have to mix them at all. In other words, I believe that when you load them into the ship, the quality constraints would be met.

If they want 2-percent sulfur coal, and in effect, if you put in that ship, half three and half one, that would meet their standard.

Or, they blend them at the powerplant in the foreign country, just as they are blended in this country.

Mr. BROWN. Except that puts an economic requirement on them. What I am trying to suggest here, is blending our coals to make the product more salable. It is kind of like an automobile dealer, if the only thing you sell are Cadillacs, then you limit yourself to a certain market.

If you have the Cadillac, Oldsmobile and Coevrolet—I don't know why I'm thinking of General Motors, but if you have all of those—then the process becomes an easier marketing process.

Mr. BOYLE. May I say something about the quality.

Some of the panels have alluded to the fact that most countries are wanting low-sulfur coal, which is true. Like I said, this is a low-sulfur market.

The reason that they want low-sulfur coal is that they are pretty smart and know who's in the driver's seat.

They know, that for one thing, because of our port constraints, because we also export metallurgical coal, we could only export approximately 20 million tons of steam coal out of this country this year, or less, maybe it's 15.

They also know that we have a tremendous oversupply of coal in this country, both low sulfur and high sulfur.

So if they know that they are going to get these coals at bargain prices, they are going to go for the low sulfur coals, and teey want the higher quality, low sulfur coals. They know it's available, they know we can't get too much of it out of the country, and they know that they are going to get it at a very good price, and I think that if we could export a lot more coal, get our ports in shape, get our transportation system in shape, we would be exporting a lot more coal. You might find sulfur content becoming less important to a lot of these people, because some of these countries don't have the same

rationale behind a 1.5 sulfur limit as the United States—I mean some don't really have SO_2 regulations that would restrict them.

Mr. FLORIO. Gentlemen, I'm just not sure that I follow the market philosophy of that, it would seem to me that overseas importers, knowing of the restrictions in our economy with regard to sulfur content, would probably feel, it seems to me, that they could get a better deal negotiating for high sulfur content.

If your assessment is correct—they are not interested in the sulfur content—why wouldn't it be that they would feel that there would be an opportunity to negotiate better on a product that is not in great demand in this country?

Mr. BOYLE. Well, I'm saying that both markets, if you look at both markets, there is a market for low sulfur coal and a market for higher sulfur coal, and in this country, both markets are oversupplied.

The low sulfur coal market is oversupplied.

Mr. BROWN. In other words, as far as U.S. coal is concerned, it is a buyer's market?

Mr. BOYLE. It's a buyer's market for both high sulfur coal and low sulfur coal.

Mr. BROWN. They can get a bargain in either kind of coal?

Mr. DAIGNAULT. If Cadillacs and Chevettes were on sale for the same price, what would you buy?

Mr. BROWN. Let me, if I may, continue with the line of questioning about the sulfur content and its effect on the market.

Are the European specifications for clean air higher than ours, lower than ours, tighter than ours?

Mr. BOYLE. I'm somewhat new in the exporting business, but as far as the general discussions among ourselves in preparation for this meeting, France has a 2 sulfur limit—sulfur content limit.

Italy has now started a proposal to limit the sulfur content that they import to 1 percent.

This—we are trying to work with people to try and make them understand some considerations about the sulfur content in relation to many environmental factors.

Most of Europe requires low sulfur coal.

Mr. BROWN. Do you mean their indigenous supply? Or their demands are for low sulfur coal?

Mr. BOYLE. Their demands are for low sulfur coal.

Mr. BROWN. But give me a percentage, in other words, in what they are buying, in the mixed version or in terms of market demands, where is their percentage level?

Mr. BOYLE. Basically less than 1.5 sulfur.

Mr. BROWN. 1.5 or less?

Mr. BOYLE. Like I said, this is basically a short-term spot market. They are asking for most of the supply in 1, 2, or 3 year agreements.

Mr. BROWN. Alright.

Mr. DAIGNAULT. Germany is very similar to the United States in that any powerplant constructed after 1983 will be required to install scrubbers, and therefore can use higher sulfur coals.

Mr. BROWN. Are they mixing imported coal with their indigenous supply to get to the burn percentage—do you know?

In Germany they have a low sulfur coal in content in indigenous coal, and so they will take a higher sulfur content and imported coal,

and mix it to lower the average content and reduce the cost of the coal, correct?

Mr. DAIGNAULT. Correct, it depends on what they are making—in Germany, a lot of the coal that they import, they blend with their own coal to make these briquettes, which they use in heating homes and they are looking for some lower sulfur coal.

Mr. BROWN. And in our sulfur content percentage, somebody was talking about Ohio and Michigan is what——?

Mr. DAIGNAULT. In Ohio?

Mr. BROWN. Yes?

Mr. DAIGNAULT. Probably from 3 to 3½ percent.

Mr. BROWN. No, no, not the coal source, the limitations on the coal burning?

Mr. DAIGNAULT. It varies from powerplant to powerplant. In Michigan, I believe that it is less than 1 percent. You basically are restricted to less than 1 percent.

In Ohio, it is a little different, but basically they are talking about some changes in the new source performance standards, from 1.2 upwards.

That may help a little but that——

Mr. BROWN. And for the most part, Ohio coal cannot be washed to much less than about 2.75—what is the limit?

Mr. TURNER. That's the general range.

Mr. BROWN. Let me, if I can, switch to the concept of market, and the reasons for the increased demand. Do any of you have any doubt about the optimism of the World Coal Study or some of these other studies about the increased exportation of coal? Somebody, I think again, you, Mr. Turner, made a reference to the concern of availability of coal from Australia because of ther labor problems, they had a strike that cut off supply, and some other doubts about some other sources of coal in the world, and then we became the market of last resort, because of the cost.

My question is, have we suddenly become the market because the supply in other countries is, for some reason, doubtful or questionable? Do you understand what I am asking?

Ms. HOLMES. First of all, to give you an idea, to give you our opinion on the overall demand, 1990, 1995, we do agree with the world coal study toward the higher end.

We think that the overall demand is going to increase very very rapidly, as countries, as the OECD countries go off of oil and their nuclear programs are delayed, they have then got to turn to coal.

But as I pointed out in my statement, and others have too—the U.S. position is not automatically assured in that long-term market.

Short term, I would like to address the runup in demand this year. We have seen an extraordinary explosion in demand for export coal this year.

In 1979, our exports overseas were about 45 million tons, 44, or 45 million tons. This year we are going to ship out about 72 million tons.

It is not all steam coal. That increase, that 25 million ton increase is over half increase in demand for metallurgical coal. If you had just that increase in demand for met coal, without the concurrent demand—increase in demand for steam coal of about 13 million tons this year, you probably wouldn't have the problem on the east coast that you do have.

But that increase in demand for met coal has come about for a couple of reasons.

First of all, the Australian labor strike, which was about 2½ months in duration, and put the Japanese on the spot market for United States coals in the latter part of August, to a great degree. To give you an example there, between the middle and the last of August, the Japanese sent over 40 ships for spot purchases for met coal to the east coast, in a 2-week period.

Then we have, of course, the subsequent labor problem in Poland, which increased the demand for our coals and that—we started to see an increase in demand for coal as a direct result from the Polish situation just about a year ago, and we're seeing even more of a demand for steam coal and for home-heating coals, from Finland, from Denmark, they are just simply being cut off from coals.

Mr. BROWN. Formerly supplied by the Polish production?

Ms. HOLMES. That's right, they cannot get it from Poland, they have got to come here, but if you go next year, again I am going to go on the short term, you are not going to see a nice steady upturn in growth, in other words, we are not going to—even if we had the port capacity next year, you wouldn't see an increase in demand from 70 million to 90 million, another 20 million ton increase, for example. It is going to be a little bit rocky, because next year we are going to see a downturn in the demand for met coal, along with the increase in—a concurrent and maintaining increase—in demand for steam coal.

So it is going to be a little bit rocky, but it is going to be there, and if we get our transportation facilities straightened out, our port facilities improved, and the capacity increased, we are going to take advantage of that demand.

Mr. FLORIO. You obviously point out what the serious problem is, that to a large extent, the ability to deal with the improvements necessary—port improvements, railroad improvements it appears to me to be contingent upon the ability to get long-term contracts, because these contracts will be the financing mechanisims that will provide us with the capital to do that.

What you have talked about is short-term opportunities, but saying that the long-term opportunities are not that sure. I am not sure what the conclusion is, except that this is where entrepreneurial skills come into play with the ability to do the marketing, whether it be the coal companies or combination coal companies and railroad companies, particularly railroads now, with their new enhanced ability to sign contracts.

That is the essence of what it is that we, that is, governmental people, will, and should be looking to do, to assist in creating the stability necessary for the private sector to go out and do the marketing and the sell, to get those contracts, to enable you to make the improvements necessary to perform and to satisfy the contractual obligations.

Mr. BOYLE. Maybe as an adjunct to what Mr. Tostensen said, there is one consideration in the domestic market regarding railroads, that should be mentioned. The pipeline that Consol built up north was destined to bring unit train rates into the railroad business, and we secured those.

In the export market, most all the rates that go to the ports are single car rates, which are the most expensive rates going.

I don't know—like you mentioned, cooperation between the railroads and Government and industry, should be stressed in order to make export movements work.

Mr. BROWN. One of the criticisms that has been made of the "World Coal Study," and some others, was done by the investment firm of Dean-Witter-Reynolds. They made the following comments in a study, and I would like to read them to you and then ask you to comment on them.

In the August coal observer, we projected needs of 91 million tons in 1985, eliminating Canada and the west coast, and adding in a 15-percent reserve margin. At this point, the best case might be 9 million higher, or 100 million tons.

One thing is certain, if all the ports are erected, the American taxpayer will take it on the chin, it is he who will be paying for the industrial revenue bonds, whether directly or through financial institutions.

This is the type of behavior, for example, line-planning for tomorrow, promising golden apples, that breeds distrust in financial markets.

Some of us have been there before.

As a finale, Secretary of Energy Charles Duncan, the Saturday before election day announced the White House would push for legislation to dredge the lower Mississippi River. Senator J. Bennett Johnston exclaimed that New Orleans and Baton Rouge will have a potential of at least 100 million tons by 1990.

Question, to whom will we ship the coal, and will we sell it or give it away as part of the specifically tailored Federal program?

Talk is cheap, indeed.

That ends the quote from Mr. Joel Price of Dean-Witter-Reynolds.

Now, the question that I have is, are we overprojecting the foreign market in some of these studies, the "World Coal Study" and so forth? Is it a temporary aberration or is it a long-term reality?

Mr. TURNER. I think it is a question of what you keep you cost per million Btu's. That's what the ultimate consumers—whether it is met business, utility, or what not–what is it going to cost him for his fuel cost.

Mr. BROWN. Well, coal as related to oil, gas, the other choices, is that what you are suggesting?

Mr. TURNER. Well, no, we also have to relate it to some heating sources of the same energy that you are producing.

Mr. BROWN. Coal?

Mr. TURNER. Right.

Mr. BROWN. Alright, now, we have learned that the Australian sources were temporarily interrupted by a labor dispute, we know what is going on in Poland, we don't know whether it is going to be temporary or permanent. And the question really is, what is your assessment, is it going to be a permanent demand? Is the increase as optimistic as generally predicted?

The temporary slowdown in Europe of nuclear power was mentioned a moment ago. If that turns around and nuclear power increases, are we going to have the expansion of demand for coal that we anticipate?

Mr. TURNER. I can't comment on that study, because Joel Price evaluates our stock too, and sometimes he is wrong in that regard.

I would just say that of the capacity that is being prepared for, in New Orleans and in Baltimore, is a capacity of 150 million tons a year.

This 150-million-ton capacity, is being built by private companies, with their own captial, so obviously they look at the fact that there is a 150-million-ton-a-year market there, that many docks are, in effect, under construction now with private money.

Mr. BROWN. Let me present one other comment that has been made, with reference to the shipping problems at Hampton Roads, the fact that there are ships tied up.

It has been suggested to me, that that may be because the ships go without contract on a speculative arrangement, that they wait until there is the opportunity to pick up the coal, and there is a spot market, and they can take it to Rotterdam or someplace else and get rid of it, once they can pick it up.

Now, what about that and the nature of contracts for the shipping or the sale of coal?

How much of it is done on a day-to-day basis, how much of it is done on a long-term contract basis, and has this increase of the European demand, or the overseas demand from Japan, been put into long-term contracts yet?

Ms. HOLMES. I'm sure others would like to add to this too, but first of all with respect to your first question, the fact that there may be ships in the Hampton Roads Harbor, for example, the Chesapeake Bay on speculation.

I hope that you ask the railroad panel the same question, but it is my understanding that you cannot register, at the pier, unless you have a cargo waiting, unless you can tell the railroad that yes, this is where my coal is coming from.

There may be ships down there in line—ships down in the harbor on a speculative basis, but they cannot get in line and they cannot be put on N&W's register, for example, or C&O's registry, unless they know where their cargo is coming from.

At least this is my—we had one instance where there was an exchange in the responsibility between a couple of transhippers to load a particular, in which we were involved, and the vessel for a period of no more than 12 hours, was left unprotected without an assurance that one or the other of us was going to supply the coal.

In that short span of time, that was all that was needed to demote that ship to the back of the queue, or in fact, take it off registry, so that comment is in fact true. This is the spot sales, and I am sure that our companies would want to answer this from their own experience.

It was mentioned that many of the steam coal sales this year, and frankly, many of the sales that have gone out on the metallurgical coal market, have been spot sales.

We traditionally, however, like to sell on a long-term contract basis, and for example, in 1979, I would have to put an estimate of at least 90 percent of the export coal was sold under long-term contract, we hope that we can return to that.

Mr. BROWN. Well, is it spot market because it is going up so rapidly, and nobody wants to write a price contract, or is it a spot market because the increase in demand may be temporary or aberrational.

I mean I think it would comfort the Dean-Witter-Reynolds analyst if we had long-term contracts written to pay for the cost of increasing our export capacity.

Ms. HOLMES. I think some——

Mr. BROWN. If these were long-term contracts, it would comfort Mr. Florio and myself in voting for the improvement of port facilities or railroads.

Ms. HOLMES. I think you have got to go back a little bit.

Some of the spot basis, of course, is because they cannot—it may be temporary in nature, you can't get a load from Poland, you can't get it from Australia, and we have got to have it from somewhere and we have got to have it now.

But there are a couple of other factors too, first, as was explained very explicitly to me by one of the buyers, the European buyers have been used to going and buying on the spot market for oil, and some of the buyers didn't quite realize that the coal business—the steam coal business might be a little bit different nature, and maybe; they didn't plan ahead quite far enough, and so now they are on the spot market.

Another thing that you have to consider, concerning the quality of coal going into my boiler, is: Are the quality assurances going to be met and is this company going to deliver the quality over a long-term basis?

If I were a buying customer, I would, very honestly, not sign a 10- or 15-year contract or a 20-year contract without having first tested the water, and I think that is one of the reasons for some of the spot sales that we have seen this year.

Mr. FLORIO. Isn't that the burden that rests upon you, as an industry, to try to resolve some of those problems in order to induce the customers to make the commitment.

I would think, and would hope, that you would have some sympathy and hope for those of us who are called upon to vote for the moneys for the Corps of Engineers to do the dredging, when there is no assurance that the dredging is going to be cost effective, because the market is not going to be there in a number of years.

Obviously it is the chicken and the egg, and I am of the opinion that the place to break into the cycle is with your ingenuity, your marketing ability, to convince the customers that you can put together the necessary package that will solve their problems, and then, of course, the risk that comes with that, falls upon you, and then you have to deal with the Government, to the extent that the Government plays a role in any respect, whether it be EPA regulations, whether it be dredging or whatever, but there has got to be risk, and the risk has to be, it seems to me, primarily on the coal industry to induce the customer to sign the contract, and that is the place to break in.

Ms. HOLMES. I think our customers, or our companies, are doing just that. Remember that this has been, this runup in demand for steam coal, has been of relatively short duration, a year is not all that long, and during that year, we have seen long-term contracts signed. I personally—although I would not state the companies or anything here—know of at least 10 long-term contracts that are in the works and would probably be signed early next year.

So I think that you are seeing that process take place. When I referred to the testing, so to speak, you are seeing a lot of shipments go out that are 15,000 tons, or 20,000 tons, or very small quantities. It is a fact that the customers want to see what they are buying before they sign a long-term contract.

Mr. BROWN. I am trying to avoid asking questions, which we can ask to the later panels, because I don't want to slow up the process. But there are just a couple of other questions, Mr. Chairman, that I do want to ask with reference to the competition from other countries, of the production of coal.

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Is the quality of United States coal in general, in its rather infinite variety as we have discussed a minute ago, no better or no worse in general, than what you can get from Australia, from South Africa, from other source countries?

Mr. DAIGNAULT. The United States has a lot of different types of coal. It has low sulfur, like Australia, and high sulfur coal.

We have better quality coal than, say, Germany. To see what the Germans do to mine coal is just incredible. They remove 600 feet of dirt off to get down to the coal seam, which is very, very low Btu coal, 3,500 Btu coal versus 12,000 Btu in this country.

Our coals are just as good—we have coals that are just as good a quality as the best coals in the world, and we have coals that are worse quality than some coals.

Mr. BROWN. But we are not necessarily at a disadvantage—market disadvantage in our production types of coal, locations, the cost of production and everything else, is that correct?

Never mind transportation, is that right?

Mr. TOSTENSEN. But what we have to keep in mind is——

Mr. BROWN Well, do you agree with that or do you disagree with it?

Mr. TOSTENSEN. Our biggest problem is the cost per million Btu, because that is what it all ends up to, and we have got more added by Government than a lot of the different countries.

Now, it is our ability to produce, that sometimes brings people back to us, although we have had strikes too, in this country, and the last one we had disenchanted some of the metallurgical buyers, and there was a big drop after the last strike in this country.

Mr. GRIM. And you have to consider that when you add $6 a ton for delay on some of the western coal that only costs $7.10 to mine now, there is a big item there.

Mr. BROWN. Really, what I am asking about now is, if the mine mouth cost of American coal is comparable to our competition abroad, then it does boil down to the fact that we have a transportation problem, and a Government control problem. But if our mine mouth cost is much much higher than the Australian mine mouth cost or other national mine mouth costs, then we have got a disadvantage going in.

That is the question I am asking. And I gather from your comments, that you would think that we do not have a mine mouth production disadvantage, perhaps beyond the coal mining laws in this country.

Ms. HOLMES. In some instances we do have a distinct advantage in terms of mine mouth cost, even in the face of some other Government subsidizing their coal industry.

For example, in Germany, the average mine mouth cost is something around $70 a long ton. Now, ours—their mining conditions are different, and they have an entirely different structure, so we do have a definite advantage there.

But in terms of, say, average delivered cost, vis-a-vis, United States vis-a-vis, South Africa, you have got to look at the types of coals and compare similar types of coals, I think we might be a little bit higher in a lot of instances.

If you look at Australia, I could cite you instances where we were lower and where we were higher, so it is just not a real clear-cut question.

Mr. BROWN. One or two final questions, are the long-term contracts being written with foreign countries? Are they also not being currently written quite as much because of the spot market nature of the present world market?

Does anybody know about the foreign contracts?

Mr. TOSTENSEN. Well, I think what you have to recognize now, the met market increased in this country this year was for different reasons than the steam coal market.

The steam coal market was because people were going off oil to coal, switching in cement plants, wherever they can.

Now, all of a sudden they are switching fuels. When you switch fuels, you don't necessarily sign up right away for long term, you are feeling around——

Mr. FLORIO. Why not, if I could just ask that?

Why would you not, if you are building a coal-fired plant in Germany, the expectation seems to me, it would be that you were going to be using it for a long period of time, and therefore would look to stabilize your prices by insuring the fact that you have a long-term supply.

Mr. TURNER. This is a question that the buyer over there is looking at from a lot of different factors that affect his thinking. As Connie has indicated, traditionally, their oil thinking was on a spot term basis.

They are switching now because of the problem and the cost of oil. The cost per million Btu of heat. Maybe they are not sure where they are going to end up down the road. There is a lot of controversy going——

Mr. FLORIO. Do you mean switching back?

Back to oil?

Mr. TURNER. Oil or to another fuel. Or, the type of coal that you are going to use. What are the environmental controls that we are going to have in our country. In some countries, they have very strict controls on the books, but they don't enforce them.

All of these factors, you have to——

Mr. BROWN. It's a little bit like the French income tax, you say?

Do they have a tough income tax, but nobody pays it?

Mr. TURNER. Right.

Mr. FLORIO. Aren't those always going to be variables?

Mr. TURNER. I think that is the essence of people, so you are going to have——

Mr. FLORIO. Right—and I come back to my point, assuming that we have got a good product, assuming that we have got some competitive incentives and benefits, you have really got to make the case, not withstanding all the variables that are out there, going back, on balance, it is in someone's interest to sign some commitments, and with the awareness that there will be this flexibility.

Mr. TURNER. I think you are going to see before 1985, that most of this overseas market will be tied up by long-term contracts. But, what we are talking about is the period of a year, and you don't just rush out and do it, that part develops.

Mr. Chairman, you were talking chicken or egg, I think—you know, the congressional decision is whether or not the coal industry in the United States should have the opportunity to compete in the foreign market.

Coal, some coal, was sold to Japan for $125 a ton in 1974. We obviously, in this country, cannot guarantee what more environmental restrictions may be on our coal mines, how many more cleaning plants we may have to build or what we may have to do.

The question is, whether the facility from dredging, or looking at the lakes as a way to do it——

Mr. FLORIO. The difficulty that I have with your presentation at this point is that the best conditions exist right now, the short-term conditions really are benefiting the industry, as I understand them, whether it be Australia, Poland, the cost of transporting from Australia—all those factors seem to be working in the interest of our coal industry in the short term.

Why don't we capitalize on the basis of those short term, beneficial developments, then deal with the long term in a more orderly way? You seem to be saying that the long-term things will work out, but it is the short term that needs some governmental assistance.

Mr. DAIGNAULT. We can't capitalize on the world conditions because we can't move the coal out of our country.

The ports—you know, we have an ability to export only 75 million tons of coal over our ports, right now.

If the world is demanding 100 million tons, it doesn't matter one bit.

Mr. FLORIO. I understand what you are saying, but if you have a beneficial short-term opportunity, you have got long-term projections of people switching over to coal, rather than oil, it seems to me that the opportunities are there for the signing of the contracts, which will enable you to address those institutional obstacles, the port deficiencies, and things of that nature.

Mr. BOYLE. We see the long-term market there, going to be a long-term market. But therein lies the problem. Let's say you are a foreign buyer, wanting to build a new coal-fired plant.

Now, you are going to design that boiler with the ability to burn a specific type of coal. The United States is competing with other countries—Australia, Canada, and so forth.

Now, I tell you that I have a coal supply for you, and at a competitive price—f.o.b. mine price and competitive delivered price. You are competing against the Australians or the Canadians or whomever for that business at similar prices.

Then he asks you:

> Can you, am I assured of getting that coal, considering the problems?—look at all the ships waiting to be loaded in ports.
>
> I'd also like to move that coal in 100,000-ton vessels, in order to make my transportation costs less.
>
> I am going to be using this for 35 years, and what can we say about that, we can say we'll take your——

Mr. FLORIO. Well, what you can say is, sign the contract—sign the contract. We give you a lower cost now, utilizing the contract to immediately start to remove some of those problems.

Mr. BOYLE. They won't buy the coal now under present port and market conditions on long-term contracts, due to unfamiliarity with U.S. coal supplies.

The situation I was describing, they have to build a new powerplant, that takes 5 or 6 or 7 years.

Mr. FLORIO. Does that not even make the contracting process more attractive, because the contract being signed can be utilized to raise the capital to do the work, so that at the time the coal is required, we will remove some of the port problems and railroad problems.

Mr. BOYLE. That's the point that I am making; they are not sure and we are not sure that somebody or some of these other constraints will be removed—the transportation constraints.

Ms. HOLMES. You see, in essence, they are saying the same thing to us. Why should we sign a long-term contract, when the Congress is making no effort or move to dredge those ports.

What assurance do we have that we will be able to utilize the 100,000-ton tankers. You are right; it really is a chicken-and-an-egg situation.

Mr. DAIGNAULT. I would think it to be that way most definitely, because without the demonstrating ability to perform, it is going to be pretty difficult to secure the commitment to take coal under a long term basis, let's—if we had to project our ability to deliver large quantities of tonnage on a recurring basis for an extended period of time, this would be simply based on the past year, that would be a rather tarnished record, indeed.

These ships are incurring as much as one-half million dollars per load, and this has become of the utmost concern to endure that type of condition for 12 months. Customers are wearing rather thin, having to put up with that type of built-in penalty, you might say, for the securing of American coal.

Mr. BROWN. Let me make one other observation along the same lines as was made by the chairman, and that is, it seems to me that we have the capacity to produce; I have heard of 100 to 200 million tons excess production capacity from some of the testimony. With that capacity there, unutilized, it seems to me that the cost predictions ought to be more stable here, than they would be in Australia, if we have got that unutilized capacity.

We know what the cost of bringing that coal out of the mine is going to be, at least in terms of the initial capital investment, because the capital investment has already been made; do you follow what I am saying?

So that the contract written with somebody who has got a demand in Europe can be written with a good deal of more predictability of the profit potential.

Now, the cost of transporting, the cost of acutally having the mine labor come in and do it, may not be quite so predictable. But it also seems to me, that we have reached the peak of our restrictive legislation at the Federal level, at least for a few years, given the flavor of the country right now. So it ought to be easier to wirte some of those long-term contracts.

Finally, it seems to me that some of the people who are involved in the trasnportation business, have already begun to make the commitments, so I too would encourage you to go out, in a sales effort, and get all those long-term contracts that you can.

That makes, as I said, the Dean-Witter-Reynolds man, and the two of us here, a little bit more secure in our willingness to put in the investment on the basis that we are not over investing in the potential of the foreign market.

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Let me just conclude with one other generalized observation, I also sit on the Joint Economic Committee. From that experience, I sense that there will be an increased dedication toward overseas marketing efforts, This means increased shipping of a variety of commodities in and out of this country, as a matter of policy.

That tends to reinforce the message that you all are giving us, that there is some need for improvement of port faciliteis and so forth.

I am sure that we will develop but one of the comments made to me by Lake Erie Port people, as I prepared for this hearing was that if you had a lot of coal moving out of Lake Erie ports, it would assist in bringing products in. Those ships aren't going to come in empty to Lake Erie ports, and the commerce would allow those products being brought in to be remanufactured in the industrial cities of the Lake Erie area.

And so there is going to be some supportive interest in other parts of the economy throughout this country, in revitalizing the ports it occurs to me.

Mr. Grim, I probably should, but I cannot resist making this observation. I hope in the negotiations with mine operators, when they come up, that somebody in the mineworkers organization will be telling the fellows how impotant the stability of U.S. production is in the effort to sell the coal abroad. Because I think that is a clear factor. If we have gotten some benefit from instability in the Australian ability to produce, then hopefully, our labor management agreement can be worked out as quickly as possible. I would say the same thing to the mine operators, Consolidated Coal, and the other people represented here, Mr. Turner, and Mr. Daignault, and so forth. I hope that that all of that can be done amicably, so that we can assure our trading partners that we can produce the coal.

Thank you, Mr. Chairman.

Mr. FLORIO. In deference to the rather long list of witnesses that we have, I would just like to express my appreciation to the panel, for being very informative, and raising a number of points that this committee looks forward to developing at a later time.

Thank you.

Mr. BROWN. Mr. Chairman, we have in the audience, Sam Speck, who, next session, will be the chairman of the State Senate Energy Environment and Natural Resources Committee, here in Ohio, and he represents a coal producing area.

I wonder if we might ask him to say a few words, I know he had hoped to be here earlier to introduce Mr. Grim, but they are in the process of considering a tax increase in the State senate proposed by our Governor just a couple of days ago. I know the ambition was to get that done before the Christmas adjournment. We know how difficult it is to get a Congress to adjourn, and I suppose that he has to go back for that purpose, but I wonder if we could hear from Senator Speck now.

Mr. FLORIO. The committee would be pleased to welcome the gentleman, and hear a brief statement from him if he has something that he would like to convey to us.

STATEMENT OF SAM SPECK

Mr. SPECK. Thank you Mr. Chairman and Mr. Brown, I apologize for being late, we are in the process of taking presents out from under

trees, instead of putting them under, in the general assembly this morning.

I think much that needs to have been said has already been said; I would simply reiterate our concern about the development of adequate port facilities, and transportation facilities on our inland rivers.

That means looking at the situation, so far as the dam at Gallipolis is concerned, the locking there, the delays. It also has to do with the dredging in the eastern ports, and particularly in the channel at Newport News and Norfolk, which affects our ability to bring in the largest tankers, which, I should say, ships for carrying coal, which are currently under production elsewhere in the world.

It also means working with Canada, where it comes to developing facilities in Montreal.

In respect to railways and highways, one of the things that I see happening here in Ohio, and I suspect elsewhere in the country, is that we are losing our railways at a rapid rate, that we may subsequently need, if we do substantially increase production of Ohio coal and coal in other States and one of the things that you may want to explore further, is whether or not our present efforts at retaining the rights of way on those lines, is adequate, and whether or not we don't need more of a national policy in that regard, because once you give up those rights of way, you have to go back and get them, it will be an extraordinarily expensive undertaking.

In the area of coal development, so far as highways are concerned, one of the things that is of concern to me, and I think many people in southern Ohio, where most of our coal is produced, has to do with the very substantial costs associated with building highways that are capable of hauling coal at an economic rate.

One of the things that we are suffering is a rapid deterioration in those highways, in areas that are used particularly for coal hauling, and one of the Federal studies that has recently been completed indicates that this is not merely a problem that is here in Ohio alone, but it is really a national problem, the problem of roads that are not built to take vehicles running within the weight limits, much less those running in excess of the weight limits.

One of the problems that a number of the smaller coal operators have had in Ohio has been being able to handle the spot market sales on a short-term basis.

They haven't had the liquidity to be able to handle the costs, and some of them have been teetering on the brink of bankruptcy as a result.

It seems to me, particularly if the free market is to operate effectively for the small operator, that we need to develop at least short-range mechanisms, until the brokerage arrangements develop sufficiently for providing loan funds, et cetera, for them to be able to participate in this market.

In the area of productivity, one of the things that has been alarming to me, is that American mines are only now developing the kind or introducing the kind of machinery to enhance productivity that has been more commonplace earlier in other places in the world.

I recently had the opportunity to go to the underground at the new Meigs mines of the Ohio Power Co., and was alarmed, really, at the degree to which all the equipment being used was of foreign import—either from Germany, Scotland, or England, and we simply

are being behind in many other areas of the world, in the kind of capital investment to enhance productivity, particularly in respect to the long haul. It seems to me that to maintain our ability to compete in the international market, it necessitates doing everything possible to encourage capital investment in those facilities.

It also, I think, necessitates careful review of safety legislation, to make certain that it is doing the job that we want it to do, without creating disincentives for productivity, that aren't related to safety itself.

Another factor that I think we have to be concerned about, and one that I have seen in southeastern Ohio, as we have looked at the whole issue of coal gassification, is the extraordinary complexity of coals.

In Ohio, we are presently doing the study of coal characteristics, but one of the things that allegedly had held up, the ultimate decision as to what or whether or not we are going to go with the coal gassification project in southeastern Ohio or the one in Perry County, Ill., had to do with the characteristics of the coal, and how those characteristics would behave in different kinds of use.

Here again, I think if we are going to have an ability to compete, exportwise, it behooves us to encourage whatever research is necessary, so that we have readily available, and this is something that certainly small firms are not apt to have readily available, as much information about the technical characteristics of our coal is possible, so that we are able then to, as rapidly as possible, indicate that our coal can meet the needs of that new kind of technological innovation.

The various characteristics of coal that a decade ago were not very important, became very important in the choice of coals, and it is important that we have that data as coal is put to new uses overseas, as well as here, so that we can very quickly provide that kind of information and indicate that our coal is going to be able to meet the kinds of needs that these people are going to have, even if they don't have it at the immediate time.

Finally, two other points. One has to do with the need to explore whether or not we should be looking at a national coal-washing policy.

Some indications are that coal washing is the thing of the future, at least here in the United States, in terms of reducing the kilowatt cost, even though it enhances the cost of a ton of coal, and perhaps here to encourage the kind of investment we need to encourage, we should be looking at whether or not we need national incentives for promoting coal washing.

These, in essence, seem to be some of the things that we should be concerned about as we develop a national policy for promoting coal export.

Mr. FLORIO. Mr. Brown.

Mr. BROWN. I have no questions, Mr. Chairman. I appreciate the Senator's testimony and I appreciate all of you testifying.

Mr. FLORIO. Thank you very much.

Our next panel is a railroad panel, and it is my understanding that we have representatives from two railroad systems, the Chessie system, and Consolidated Rail Corporation.

I would like the appropriate representatives who are going to testify to come forward. Please identify yourselves your statements will be

made a part of the record in their entirety and the witnesses may feel free to proceed.

Perhaps if we start left to right.

Mr. KIMMERLE. Chris Kimmerle, Consolidated Rail Corporation.

Mr. ARNETT. Al Arnett, Conrail.

Mr. WEBER. Carl Weber, Chessie system railroads.

Mr. GLENN. Jim Glenn, CXS Corp.

STATEMENTS OF CARL WEBER, ASSISTANT TO VICE PRESIDENT, COAL DEPARTMENT, CHESSIE SYSTEM RAILROADS, ACCOMPANIED BY JIM GLENN, CXS CORP.; AND AL ARNETT, ASSISTANT VICE PRESIDENT, GOVERNMENT AFFAIRS, CONRAIL, ACCOMPANIED BY CHRIS KIMMERLE, DIRECTOR OF ENERGY FOR SALES PLANNING

Mr. WEBER. My name is Carl Weber, I am employed by the Chessie system railroads, in the coal department for many years now.

The Chessie system railroads operate coal transshipping facilities at two tidewater ports, and at Lake Erie.

Newport News, at Hampton Roads, has the present capacity to dump 25 million tons of coal annually Curtis Bay at Baltimore, served by B. & O., can handle 15 million tons of coal annually, and the Chessie system railroads Presque Isle dock at Toldeo, has handled over 20 million tons of coal in the past.

Our records to date indicate that none of our railroads has carried any Ohio origin coals for overseas export. Since the upsurge in steam coals which began in 1979, we have had considerable number of inquiries, regarding the possible movement and possible adjustment freight rates, but there been no result in movement.

To date this year, our railroads have moved and dumped over 29 million tons of coal for export at the tidewater facilities, none of which has originated in Ohio, even through B. & O. has published specific freight rates to apply on Ohio origin coal, to Baltimore for export.

A check of the statement of Eastern Railroads indicates that at all tidewater ports, there has been no Ohio origin coal moved, in either last year or this year through September, which is the last one so published.

We are told by the transshippers of the coal that is moved via our lines, as Mr. Boyle mentioned before, that the European users are requesting a coal of a lower sulfur content that is generally available in Ohio, and as pointed out too, earlier, the possiblity exists of beneficiating Ohio coal by mixing it with a lower sulfur product, which could probably be best handled in a ground storage site, but could probably be handled by moving cars into a dumper in alternate moves of one coal or another, either at tidewater or at Toledo, the Great Lakes ports.

I think we mentioned except for the higher sulfur content that generally exists in Ohio coal, the Ohio coals are quite similar in nature to the coals found in northern West Virginia, and western Maryland, which are closer to the tidewater piers, and carry a freight rate advantage.

The Toledo docks, which we say have a capacity of about 21 million tons, dumped only 11 million tons via C. & O. and B. & O. last year,

and we're expecting 10 million tons this year. Certainly, we have substantial unused capacity to handle Ohio coal, or a blend of Ohio and other coal at the Toledo facilities for export.

Unless oceangoing vessels, small oceangoing vessels, which would take on coal at a Great Lakes port, as a return haul to Europe, there would be additional handling, of course, and the transloading, necessary transloading of the Great Lakes coal into larger vessels, either at Quebec or Comtrecoeur.

At the present time, I mean we could envision some undetermined amount of Ohio coal, very small compared to the total, moving overseas, via either tidewater facilities, Great Lakes or the Ohio Mississippi system, but because of the nature of the coal, and the economic factors that we mentioned before, we feel it is unlikely that any substantial and long lasting market would be developed. We would be highly pleased, of course, to be able to participate in this movement to any of our facilities, especially to the Toledo dock, where we have maybe 10 million tons, unused capacity, and we would look forward to the time when we will have our double dock capacity at our tidewater facilities, which should be within the next 2 years, it is planned to be within the next 2 years.

The Chessie system railroad maintains the largest railroad-owned fleet of open-top hopper cars, approximately 70,000 cars right now, which would mean that on any given day, we can be handling 6 million tons of coal.

During the present year, with Chessie system railroads coal originations already over 90 million tons, there has been no car shortage at any mine served by our lines.

Our entire plant is in good condition, the roads are well operated, and we have seen no problem in handling any additional amount of Ohio origin coal which could be generated.

In 1979, now this bears out a point which the coal people mentioned before, the mines served by our lines in Ohio, produced 1.4 million tons of coal. This compares with 6 million tons in 1973. I did not have the opportunity to go back to 1970, but I'm sure that the tonnage originated by the Chessie system railroads earlier than that, was even larger than that, which would indicate certainly the capacity of the mines to produce more, and for us to haul more.

Except for the backlog of coal at the Tidewater ports, and a similar problem at overseas receiving ports, the present lack of ground storage at east coast piers and Toledo, which would hamper the blending of Ohio coals with other coals, the Chessie system is poised to carry whatever additional Ohio coal production can be generated.

The east coast problem will be corrected with the advent of additional dumping facility, capacity, rather, and ground storage, and the blending of coal could be handled in the dumping of cars at any railroad facility.

Thank you.

[Testimony resumes on p. 78.]

[Mr. Webber's prepared statement and attachments follow:]

STATEMENT OF CARL B. WEBER

My name is Carl B. Weber. I am employed by the railroads commonly referred to as the Chessie System railroads as Assistant to Vice President - Coal Department - with headquarters in the Terminal Tower, Cleveland, Ohio. I first joined the Baltimore and Ohio Railroad in its Coal Department in April 1941 and the Chesapeake and Ohio Railway in February 1947 and have held positions in the coal departments of those roads since that time.

The Chessie System railroads operate coal transshipping facilities at two tidewater ports and at Toledo on Lake Erie. The Newport News piers, served by the C&O, have a capacity to dump 25 million tons of coal annually; the Curtis Bay facilities, served by B&O at Baltimore, can handle 15 million tons annually; and the C&O Presque Isle docks at Toledo, which have handled over 21 million tons of coal annually.

Chessie company records indicate that, to date, none of our system roads has ever carried any Ohio-origin coal for overseas export. Since the upsurge in steam coals for the European market, which began in late 1979, we have entertained inquiries regarding the possible movement of Ohio-origin coals for the export market, but there has been no resultant movement. To date this year, Chessie System facilities at Newport News and Baltimore have dumped over 29 million tons of coal for export, none of which has originated in Ohio, even though the B&O has published freight rates to apply on Ohio-origin coal to Baltimore for export. A check of the statements showing tidewater bituminous coal tonnage dumped at East Coast ports from January 1979 through September 1980, issued by the Coal,

Coke and Iron Ore Committee, Eastern Railroads, shows no Ohio-origin coal having been handled via any of the tidewater facilities for export.

We are informed by transshippers of coal which is moved via our lines that European users are requesting coal of a lower sulphur content than generally is available in Ohio. The possibilitiy exists, of course, of beneficiating Ohio coal by mixing it with a lower sulphur product, which could be well handled at ground storage sites or possibly satisfactorily by the dumping of specified cars of Ohio and other origin coal into a vessel at the tidewater or Great Lakes dumpers.

Except for the higher sulphur content that generally exists in Ohio coal, those coals are similar in nature to coals found in Northern West Virginia and Western Maryland, which are closer to tidewater piers and therefore carry a rail freight rate advantage.

The C&O Toledo docks, over which 21.3 tons were transshipped in 1966, dumped 11 million tons in 1979 and expect to dump about 10 million tons in 1980. Certainly we have substantial unused capacity to handle Ohio coal or a blend of Ohio and other coal via the Toledo facilities for the export market. Unless small ocean-going vessels would take on coal at Great Lakes ports as a return haul to Europe, extra handling - and resultant additional costs - would be involved in the transloading of Great Lakes coal into larger ocean-going vessels at Quebec or Contrecoeur.

At the present time, we could envision some undetermined amount of Ohio coal - small when compared to the total U. S. export tonnage - moving overseas via the tidewater facilities, Great Lakes dumpers, or the Ohio-Mississippi river system through Gulf Ports; but, because of the nature of Ohio coal and the economic factors, we feel that it is unlikely that any substantial long-lasting market will develop.

The Chessie System railroads would, of course, be highly pleased to be able to participate in such a market, if it did develop. We have more than 10 million tons unused capacity at the C&O Toledo dock and, as a result of additional pier facilities already planned or underway at tidewater ports, will double our capacity there in the next few years.

Chessie System railroads maintain the largest railroad-owned fleet of open-top hopper cars in the country - approximately 70,000 serviceable cars, with the capacity to handle about 6 million tons of coal on any given day. During the present year, with total Chessie coal originations already over 90 million tons, there has been no car shortage at mines served by our lines. The entire Chessie plant is in good condition, the roads are well operated, and we see no problem in handling any additional amount of Ohio-origin coal that could be generated. In 1979, mines served by the Chessie System railroads in the State of Ohio produced 1.4 million tons of coal, compared with 6 million tons in 1973, indicating that the Ohio mines have the capacity to produce considerably more tonnage than is now being generated and that the Chessie System railroads can handle it.

Except for the present backlog of coal at U. S. tidewater ports waiting to be dumped into vessels - and a converse similar problem at overseas receiving ports - and the present lack of ground storage at East Coast ports and Toledo, which would hamper the blending of Ohio coals with other coals, the Chessie System railroads are poised to carry whatever additional Ohio coal production that can be generated.

The East Coast problem will be corrected with the advent of additional dumping capacity and ground storage; and the blending of coals can be handled in the dumping of cars at railroad transshipping facilities.

DISTRIBUTION OF OHIO-ORIGIN COAL BY DESTINATION STATES - YEAR 1979

(in 000's of Net Tons)

Destination State	All-Rail	River	Great Lakes	Truck	Tramway, Conveyor, Private Railroad	Used at Mines or Sold to Employees	Total
New York	5	-	-	-	-	-	5
Pennsylvania	1	1,734	-	386	-	-	2,121
Ohio	6,059	5,690	-	12,193	8,117	34	32,093
Indiana	6	354	-	9	-	-	369
Illinois	369	-	-	-	-	-	369
Michigan	4,393	-	139	35	-	-	4,567
Wisconsin	-	-	434	-	-	-	434
Minnesota	28	-	28	-	-	-	56
Iowa	-	6	-	-	-	-	6
Maryland	25	-	-	-	-	-	25
Virginia	32	-	-	-	-	-	32
West Virginia	21	44	-	19	-	-	83
Georgia	-	22	-	-	-	-	22
Kentucky	-	216	-	2	-	-	218
Tennessee	-	2,780	-	-	-	-	2,780
Alabama	-	62	-	-	-	-	62
Washington	4	-	-	-	-	-	4
All Other	-	-	-	-	-	-	-
Canada	-	-	433	-	-	-	433
Total	10,941	10,908	1,034	12,644	8,117	34	43,678

Source: Department of Energy

Note: Unit figures may not add to totals because of rounding.

DISTRIBUTION OF OHIO-ORIGIN COAL - YEAR 1979

Department of Energy reports show the following distribution of Ohio-origin coals during the year 1979: (in 000's of net tons)

	Electric Utilities	Other Industrial	Retail Sales	Other	Total
To U. S. Destinations:					
Via All-Rail	10,072	869	-	-	10,941
River	10,844	64	-	-	10,908
Great Lakes (*)	377	222	2	-	601
Truck	7,847	4,627	171	-	12,644
Tramway, Conveyor, Private Railroad	8,117	-	-	-	8,117
Used at Mines or Sold to Employees	-	-	-	34	34
To Canada:					
Via Great Lakes (*)	237	195	-	-	433
	37,494	5,977	173	34	43,678

(*) - The DOE reports state that the tonnage via rail-lake does not include vessel fuel nor shipments to commercial docks in the U. S. and Canada for which consumer uses are not available. This tonnage apparently has been included in the all-rail category, as reports from the Ore & Coal Exchange, Cleveland, OH, show that a total of 1,467,560 tons of Ohio-origin coal was shipped to Lake Erie docks in 1979.

The Ore & Coal Exchange report AC-8 shows the following as originating railroads of the lake tonnage:

B&O	132,000 to ns
Conrail	947,000
N&W	388,000

and distribution by lake dock:

C&O Toledo	469,000
B&O Toledo	17,000
N&W Sandusky	38,000
B&LE Conneaut	119,000
CR Toledo	112,000
CR Ashtabula	713,000

A. W. BROPHY, MANAGER

JANUARY 15, 1980

ORE AND COAL EXCHANGE - CLEVELAND, OHIO

STATEMENT SHOWING ORIGIN DISTRICTS OF BITUMINOUS LAKE COAL AND BY ORIGINATING RAILROADS
CUMULATIVE REPORT FROM JANUARY 1, 1979 TO DECEMBER 31, 1979 INCLUSIVE

REPORT NO. A.C.-8

(CARGO & FUEL - NET TONS)

ORIGIN DISTRICTS		ORIGINATING RAILROADS	UNLOADED AT LAKE ERIE PORTS OVER MACHINES OF ROADS SHOWN							TOTALS	TOTALS FOR DISTRICTS	
			TOLEDO			*SANDUSKY	LORAIN	*ASHTABULA	*CONNEAUT			
			C.&O.	CONRAIL	B.&O.	N.&W.	B.&O.	CONRAIL	B.&L.E.		1979	1978
OHIO	NO. 8 OHIO	B.&O.	11,939		60				77,002	89,011		
		CONRAIL	118,955	108,380				278,350	5,072	510,757		
		N.&W.	337,701	3,557	8,132	38,433			3	387,826	987,594	1,500,313
	LEETONIA	CONRAIL			305				1,530	1,835	1,835	0
	CAMBRIDGE	B.&O.								0		
		CONRAIL								0	0	8,322
	SOUTHERN OHIO	C.&O.								0		
		CONRAIL								0		
		N.&W.								0		
		B.&O.								0		
		O.T.K.I.								0	0	19,258
	MIDDLE	CONRAIL						434,845		434,845		
		B.&O.			7,693				35,593	43,286		
		N.&W.								0	478,131	333,277
PENNSYLVANIA	FREEPORT	B.&L.E.							698,086	698,086	698,086	511,346
	BUTLER-MERCER	CONRAIL								0		
	SUTTON	B.&L.E.							2,259,314	2,259,314	2,259,314	2,069,773
		L.E.,F.&C.		20,206				771,896		792,102		
		CONRAIL		7,083				1,032,534	1,863	1,041,480	1,833,582	1,941,878
	PITTSBURGH	B.&O.	39,370		1,343				12,728	53,441		
		CONRAIL		272,085		32,447		111,106	5,285	420,923		
		N.&W.								0		
		B.&L.E.							2,881,725	2,881,725		
		P.&L.E.						23,207		23,207		
		MONTOUR		57,640		4,599		344,468		406,707	3,786,005	2,862,139
	CLEARFIELD	P.&S.HAW.	2,771					86,923	923,228	1,012,922		
		B.&O.			14,394				462,930	477,324		
		CONRAIL		35,239	87			491,068	70,277	596,671	2,086,917	2,300,730
	CONNELLSVILLE	B.&O.			11,972					11,972		
		CONRAIL								0		
		MONONGAHELA								0	11,972	30
W.KENTUCKY	KENTUCKY	CONRAIL								0	0	0
WEST VIRGINIA	MOUNDSVILLE	B.&O.								0	0	28,133
	FAIRMONT	B.&O.	15,539		133,641				2,209,763	2,358,843		
		MONONGAHELA		333,882	1,332			2,145,702	111,976	2,592,892		
	CUMBERLAND-PIEDMONT	WESTERN MD.								0	4,957,735	3,705,781
	ELK RIVER-GAULEY	B.&O.	190,493		355,538				164,929	708,960		
		WESTERN MD.			9,533				17	5,550	714,510	1,066,605
	KANAWHA	B.&O.							1,331	1,331		
		CONRAIL		932,195				478,538		1,410,733		
		C.&O.	1,710,377		191,824	41,058		137,597		2,080,892	3,492,956	3,080,094
	THACKER-KENOVA-TILLER	N.&W.	1,129,146	313,661	16,270	3,196,813		48,275		4,704,155	4,704,155	3,081,537
	NEW RIVER	C.&O.	852,847		52,319	3,213				908,379		
		CONRAIL	12,087							12,087	920,466	602,420
	POCAHONTAS **	N.&W.	1,782,543	146,815	84,222	811,937		55,360	395,609	3,276,486	3,276,486	2,380,950
		C.&O.	3,302,983		203,070	412,599			3,649	3,922,302		
KENTUCKY	KENTUCKY	L.&N.	1,284,955	259,730	21,543	523,584			8,999	2,098,372		
		SOUTHERN				10,194				10,194	6,033,658	4,928,052
VIRGINIA	VIRGINIA	CLINCHFIELD	13,387		5,259	636,252				654,901		
		L.&N.								0		
		INTERSTATE		6,679	7,086	3,375				17,140		
TENNESSEE	TENNESSEE	L.&N.								0	672,041	728,329
WESTERN	OKLAHOMA	SOUTHERN	107,524	13,815	10,106					131,445		
		S.L.S.F.								0	131,445	486,559
											0	CREDIT 65
TOTALS			10,919,627	2,510,967	1,135,629	5,714,325	0	6,439,871	10,326,469	37,046,888	37,046,888	31,635,463

** POCAHONTAS N.&W. INCLUDES POCAHONTAS, VIRGINIAN, TUG RIVER, UPPER BUCHANAN AND CLINCH VALLEY #1 AND #2

* DUE TO DUMPINGS AT SANDUSKY, ASHTABULA AND CONNEAUT BEING PARTIALLY FROM STOCKPILES, ORIGIN DISTRICTS FOR DUMPINGS AT THESE DOCKS ARE BASED ON PERCENTAGES OF INPUT INTO THE STOCKPILES FROM THE VARIOUS ORIGIN DISTRICTS.

PRODUCTION OF BITUMINOUS COAL AND LIGNITE,
BY STATES, WEST AND EAST OF THE MISSISSIPPI RIVER
(In 000,000's of Net Tons)

State	* 1979	* 1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	Thru 1965	Maximum Production Year	Maximum Production Tons
AK	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
AZ	12	9	11	10	7	6	3	3	1	-	-	-	-	-		1979	12
AR	1	1	1	1	-	-	-	-	-	-	-	-	-	-	100	1907	3
CO	18	14	12	9	8	7	6	6	5	6	6	6	5	5	530	1979	18
IA	1	-	1	1	1	1	1	1	1	1	1	1	1	1	358	1917	9
KS	1	1	1	1	-	1	1	1	1	2	1	1	1	1	285	1918	8
MO	5	6	6	6	6	5	5	5	4	4	3	3	4	4	305	1975	6
MT	32	27	27	26	22	14	11	8	7	3	1	1	-	-	172	1979	32
NM	12	12	11	10	9	9	9	8	8	7	4	3	3	3	134	1978	12
ND	14	15	12	11	9	7	7	7	6	6	5	4	4	4	110	1978	15
OK	6	5	6	4	3	2	2	3	2	2	2	1	1	1	186	1977	6
TX	23	21	16	14	11	8	7	4	-	-	-	-	-	-		1979	23
UT	9	9	9	8	7	6	6	5	5	5	5	4	4	5	287	1977	9
WA	5	5	5	4	4	4	3	3	1	-	-	-	-	-	149	1977	5
WY	71	58	46	31	24	21	15	11	8	7	5	4	4	4	418	1979	71
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17		
WEST	211	184	164	136	111	92	76	64	51	45	33	30	29	28	3,052	1979	211
%	27.4	28.1	23.7	20.1	17.1	15.2	12.9	10.8	9.2	7.4	5.9	5.4	5.2	5.3	9.5		27.4
AL	24	20	22	22	23	20	19	21	18	21	17	16	15	14	1,027	1979	24
IL	59	49	53	58	60	58	62	66	58	65	65	62	65	64	3,910	1918	89
IN	27	24	28	25	25	24	25	26	21	22	20	18	19	17	1,241	1918	31
KY	143	131	146	144	144	137	128	121	119	125	109	101	100	93	3,090	1977	146
MD	3	3	3	3	3	2	2	2	2	2	1	1	1	1	272	1907	6
OH	46	44	48	47	47	45	46	51	51	55	51	48	46	43	2,270	1970	55
PA	87	75	85	86	84	80	76	76	73	80	79	76	79	81	8,649	1918	179
TN	12	10	9	9	8	8	8	11	9	8	8	8	7	6	424	1979	12
VA	42	30	38	40	36	34	34	34	31	35	36	37	37	36	971	1976	40
WV	115	85	95	109	109	102	115	124	118	144	141	146	154	150	7,122	1947	176
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	171		
EAST	558	470	527	543	538	512	515	531	501	558	527	516	524	506	29,148	1947	586
%	72.6	71.9	76.3	79.9	82.9	84.8	87.1	89.2	90.8	92.6	94.1	94.6	94.8	94.7	90.5		93.0
TOTAL U.S.	770	654	691	679	648	603	592	595	552	603	560	545	553	534	32,202	1979	770

* - Preliminary

SOURCE: Bureau of Mines
NOTE: Unit figures may not add to totals because of rounding.

Mr. FLORIO. Thank you very much.
We will be pleased to hear from the representative from Conrail.

STATEMENT OF AL ARNETT

Mr. ARNETT. Thank you. I am Al Arnett, the assistant vice president of Government affairs of Conrail of Washington, and with me is Chris Kimmerle, director of energy and sales planning from Philadelphia.

Conrail is a major factor in the movement of coal in Ohio. We serve 13 mines. Conrail gives Ohio coal producers three options for transporting their coal to foreign markets.

Using Conrail's lines, Ohio coal producers can, one, ship the coal to Atlantic ports through facilities in Philadelphia, Camden, N.J., Baltimore, and New York.

Two, they can haul their coal to ports on Lake Erie, where the coal is transferred to lake vessels, and shipped to the Atlantic by way of the St. Lawrence Seaway.

Three, they can haul coal to facilities on the Ohio River, where the coal is transferred to barges and shipped down the Ohio and the Mississippi Rivers, to the lower Mississippi facilities for export.

Conrail serves four Atlantic port hold facilities. In New York, at Port Reading, which is really in New Jersey, it is just east, or west, rather, of Staten Island, across the—from Staten Island, just south of Newark.

In Baltimore, we have a small coal handling facility at Canton, Consolidated Coal is building their own facility next to that.

We also move coal, or have routes to Chessie's Curtis Bay facility in Baltimore. We are in the process of working on a proposed new terminal, the Bolson Street Terminal, in Camden.

Our largest facility, in Philadelphia, the Greenwich Pier 124. Because Greenwich Pier 124 is the major coal export facility in Pennsylvania, Conrail and the Commonwealth of Pennsylvania have undertaken a significant program to renovate the facility.

Conrail is investing just under $4 million to fund the design and engineering costs. The Commonwealth of Pennsylvania will soon take title to that property, and invest an additional $23 million, to triple the optimum loading capacity of the pier, to roughly 10 million tons a year. The completion of this is estimated any where from 24 to 30 months.

And we are, by the way, encouraging, just as the Consolidated Coal testimony, we are encouraging privately funded and built coal handling facilities.

Another is across the river from Philadelphia, in Camden. Conrail has worked closely with an Ohio Valley producer, an exporter of coal, and the South Jersey Port Corp., to develop, to serve a proposed new coal handling facility, the Bolston Street terminal, and when that one is completed, we will have a throughput capacity of some 2 million tons a year from that terminal.

Producers shipping coal via the St. Lawrence Seaway have two options with us. They can use the Conrail rail-to-vessel facility at Ashtabula, which has an annual throughput capacity of 6.5 million tons, and presently has a surplus capacity of over a half million tons a year.

This terminal was completely modernized just about 12 years ago, and is in good operating condition. Last year Conrail spent about a third of a million dollars to upgrade the facility's stack room and the cleaner.

The other St. Lawrence option is they can ship coal to a similar facility at Conneaut, which is served by Conrail through connecting service with the Bessemer and Lake Erie Railroad, and this facility has an annual throughput capacity of 13½ million tons. That one has a current surplus capacity of more than 1 million tons.

For coal producers who would like to explore the possibility of shipping export coal, via the Ohio and the Mississippi, as your first panel impled, Conrail, through it's connections with the Chessie system, serves a rail to barge facility at Gallipolis.

Conrail is willing to establish a scale of rates from Gallipolis to the lower Mississippi, as we are discussing for coal producers in the Weirton, Pittsburgh area, to make a run from Jacks Run, or the Jacks Run rail-to-barge facility, where we should export coal in the Ohio and Mississippi river route market.

In the last 4 years, I am—I will make this short—it seems as though others have made some sort of a death pronouncement on this.

On Monday, I am sure that we read that the new administration will be looking toward sailing—sailing into the sunset—selling a great number of Conrail routes, and even, oh, 2 hours or so ago, in Washington, was announced the U.S. plan for the dismemberment of Conrail, some 5,200 miles are to be auctioned off, one way or another. It is my understanding, I just made a call, that few of those affect Ohio, most of them are in the East, particularly in New England, some light-density lines.

But at any rate, over the past almost 5 years, we have received from the purchase of securities by the Government, somewhere like $3.1 billion. As a matter of corporate policy, about 90 percent of that $3.1 billion has been invested in physical plants. So that regardless of what or who might be here after us, as good trustees of that money, they would find good locomotives, track in good repair, and good rolling stock, and indeed they will.

We have now a fleet of some 38,000 servicable hopper cars. We have in this past 4 years, acquired 5,500 brand new open hopper cars. We have totally rebuilt 17,000 open hopper cars.

As of this day, no way could we have said this 3 or 4 years ago, as of this day, we have about 5,000 open hoppers underutilized. We have 1,000 open hoppers laid up.

Three or 4 years ago, we did not have motive power. We literally had trains made up and ready to go, waiting for hours and sometimes days to have enough power hitched to them to pull them to wherever they were going. Today, we have almost 4,500 locomotives, 75 percent of those locomotives are either brand new or have been totally rebuilt.

This morning, we have excess power. There are 600 units idled in the Conrail system for lack of business.

Although the Ohio coal producers have many options, and adequate facilities for transporting their coal to market, they are a little bit like Conrail. There are those who have said you are in the wrong place, meaning your location is bad, or you are not really a quality act. Ohio has a location problem and a quality of coal problem, and that causes enormous problems in the penetration of that export market.

The sulfur content is high. The only market that we can see for that, a viable, present market—in fact, there is use there now and there have been inquiries coming to us—is a Spanish cement industry. This presents the largest single market, and it is a market that is growing most rapidly.

Conrail has received several rate inquiries from transhippers about Ohio coal, exported through peir 124.

But we have had no requests for permits. The first panel was discussing getting on the register. What they were literally talking about was getting in the lineup for a permit. Nobody is standing a line for Ohio coal with a permit that says that they are going to receive that coal on time for cement plants.

All right, getting the coal to market presents a second problem for Ohio, and the first panel also alluded to this. Ohio does have a location problem.

Ohio's competitive position is reduced by it's inland geographical position. Ohio coal shipped via an Atlantic port competes with high-sulfur coal produced in Pennsylvania, West Virginia, and Virgina, and other States closer to the eastern seaboard.

Distance means costs. Transportation costs are more for Ohio, because it simply travels a longer distance and has to make it up the west face of the Appalachain mountains to make it down the other side.

Distance plus transfer charges were mentioned in the first panel. Exporting via the St. Lawrence seaway also puts Ohio coal at a competitive disadvantage, and Mr. Kimmerle has worked up some cost differentials on that, that I thought that you would find interesting.

Coal shipped to the Ohio River—down the Ohio and Mississippi River route, would compete with high-sulfur coal in Illinois. which is also located and mined closer to barge routes on the Mississippi.

So again, the price of Ohio coal, because it travels farther to market, will at least be most competitive by disadvantaged.

But as a position in Ohio, we are obviously a second position to the Chessie system here. They have many more route miles than we do, and serve many more coal mines, it is a matter of fact to put it into perspective, even though the figures surprised me a little bit.

Last year we moved 78 million tons of coal. Mr. Weber says Chessie moved 90 million. I had no idea that we were even—this year, I mean—I had no idea that we were even that close to the Chessie.

The other is, in 1976, when we came into business, after the writing of the final system plan, we had laid our rehabilitation plans, and our purchasing and rebuilding plans and so forth, in anticipation of 1979, and 1980, at carrying just under 100 million tons of coal, 98.7. Therefore, the rail lines that have been rehabilitated, the seamless, welded rail that has been put down, all of those 5 million new ties a year that go in great measure, went into those routes over which coal rolls. Coal, because it is heavy, will beat a railroad to death. Since our railroad was down in the heels and sunk in the mud, most of those investments were put directly into moving all of these heavy weights.

The railroad was literally built back and to this day is back to capacity. To easily move without any deteriorating effect 100 millions of tons of coal a year—and we're down now to around 75 to 78 million.

Thank you.

Mr. FLORIO. Gentlemen, thank you very much.

Mr. Brown?

Mr. BROWN. Thank you very much.

Mr. Kimmerle, Mr. Glenn, do they have anything to add here?

Mr. GLENN. I would just emphasize that our company has met this extraordinary challenge with regard to coal export demands this year, and has innovated in every way possible, given the existing facilities.

We have that barging operation at Curtis Bay, which is costly for the shipper, but we have saved some time, reduced some demurrage as a result of that sort of innovating loading process.

Again, I would just emphasize what Carl Weber has said, that our coal haulage, has doubled in 1980, I mean the capacity of the existing facilities, to some extent, does not restrain the ability of a company such as Chessie, to meet the extraordinary demand.

Mr. FLORIO. If I could just ask a point.

That doesn't reflect the increased cost as a result of those bottlenecks.

I mean you may very well be hauling much more and that is commendable, but to the degree that you have those bottlenecks at the port, it is just slowing things down a bit, and it is increasing the cost to the ultimate consumer, which certainly has to have an impact. As you have heard from some of the coal producers today, those extra costs are variables in the overall equation that is causing foreign customers to have apprehensions, and that is one of the considerations that is causing them to be somewhat reluctant in signing long term contracts.

Mr. WEBER. This is all true, but if we can go back to October 1979, sometime before that, I am sure that we didn't forsee this terrific upsurge in the demand for steam coal, nor did any of the coal producers, nor the exporters.

If we had, I am sure that some one of us would have got moving a little faster than we all did.

So that it came suddenly, and it came to be handled—the coal came to be handled in a slightly different way or manner from what it had been previously.

The smaller movements, before 1979, and there have always been peaks and valleys in them.

Generally, these have been handled by a smaller number of transshippers, that is, exporters moving coal from the smaller number of mines, and it fell into a pattern that was much more organized than existed when the upsurge came. We have many many more exporters handling the coal now than has normally been over the past few years.

They in turn, are getting their coal from many many mines, many of which were not familiar with the movement of export coal or had never handled any before.

So that during the past year, there has been a considerable amount of confusion in just getting the coal to the port or shipping the coal, very often a ship would arrive at the port, and would be registered, and the coal hadn't been shipped yet from the mine, which has been—this is not the operation of the people who are here, like Consolidation Coal Co., today, who have been in the market for many years.

This is coming about from some of the newer exporters. So as this movement becomes more organized and everyone, the exporters, the

coal operators, and the railroads and the shipping companies and the agents in coordinating this become more familiar, this in itself, is going to improve the situation.

We have a capacity now of 40 million tons in Baltimore and Newport News. Through the courtesy of Consolidation Coal Co., Island Creek Coal Co., we are looking forward to an increase in that capacity to be doubled in 2 years, with additional prospects in mind, if necessary.

Some of which are being considered.

Mr. FLORIO. Thank you.

Mr. Brown?

Mr. BROWN. Let me try to establish a couple of basic premises again here. Because of some of the testimony that was given, Mr. Arnett talked about going up the western face of the Appalachian mountains, as opposed to a downhill run.

How does the cost in transportation by rail affect the rates? I'm not sure that I really understand that, as noted in the opening of the session, I am not on this particular subcommittee, so I'm not clear in my mind as to what are the things that relate to the transportation cost by rail.

Obviously one is demurrage, as in a vessel having to wait at a port to pick up the coal. If you have got the hoppers cars tied up for 6 days before they can be unloaded, I would assume is one the significant factor. The ability to stack coal outside the mine mouth so that when the train arrives, you can put the coal right into it, and get the train moving, or the ability to stack coal at the port facilities, so that you take it out of the train and get the train back on the road to pick up the next load, would be factors in that regard.

But what other factors, transhipment or offload—I'm not sure that I understand exactly what transshipment is, first of all, offloading from one mode of transportation to another. I would assume that is a significant factor, unloading from a rail car to a barge, or from barge to a ship. Could the costs be held down by providing ground storage facilities at ports? Are there opportunities for loading coal directly onto ships?

Now, I understand some of those factors, but could you explain to me some of the others, and could you also begin to put a figure on what some of those cost factors are?

It was suggested that Mr. Kimmerle had some kind of a study on that matter, and if you have got something that you could put up here so that we could look at it and let us make it the basis of questions, I would appreciate that.

Mr. KIMMERLE. I'm not sure that I completely understand your question, but I will try to respond.

The way that Conrail does their pricing on coal movements, is that we try to anticipate what our actual costs will be from point A to point B, that we do.

It includes the positioning of the cars at the mine, sending out the locomotives with the cars and the cabooses, and the switching at the mine site.

There we have this haul from the mine to the port, included there, would be primarily the distance involved, the wear and tear on the railroad itself. The crews requirement, the number of crew changes that we need to make, labor costs go up with distance, the number of

divisions we have, then, getting into the port itself, the ability to handle the coal in the port area and the costs of dumping the coal into the vessel.

Conrail's rail tariffs include the price of dumping the coal, if it is a Conrail-owned facility.

Mr. BROWN. Does that price go up, though, if you dump onto the ground and then reload and then somebody has to reload into the vessel, I would assume that it would?

Mr. KIMMERLE. At the present time we do not have that capability. However, under the system that we use for permitting of the loading of cars, and the registration of vessels, we have not experienced a delay in handling equipment at our pier 124 in Philadelphia. The way we operate at the pier, is we will issue a permit in anticipation of the berthing of the vessel, at the pier.

That permit allows the coal producer to load his hopper cars. We would normally issue that permit in the neighborhood of 14 days in advance of the berthing of the vessel.

We would, under that system, allow about 10 days for the transshipper to bring together his consignment of coal, and it will be yarded out somewhere of the Philadelphia area, we would then allow Conrail 4 days to bring it down to the pier and get it onboard the vessel.

So essentially, in looking at an export move, Conrail tries to have a train meet a vessel, and with that system, we have been very successful, to date, and we have had a minimal amount of congestion in the port area, and as a result, we have had good utilization of our equipment.

What we have experienced in recent months, is a shortage of coal for the export market. One of the major reasons for delays now, in the port of Philadelphia, is that we have given out our permits, and we have registered vessels, and the time comes for the vessel to berth at the pier, and the coal is not available.

As a result, we have had the waiting time at Philadelphia go from about 3 days that we experienced during the summer, and late fall, to about 7 or 8 days now.

But again, one of the problems that we are facing in the Port of Philadelphia now is a shortage of coal.

Mr. FLORIO. If the gentlemen would yield on that point, when you heard statements from the coal producers about unused coal capacity, how does that square with your concerns?

Mr. KIMMERLE. I only know that in dealing with the transshippers that we have a number of transshippers now that are requesting extensions of up to 1½ months to put together cargos of coal, and I can only intrepret that to be the lack of availability of coal in the area that they are looking.

What the reason for that is, maybe it is of quality consideration, in that the transshipper has gone out and made commitments for a certain quality of coal, and has been unable to find it in the marketplace.

Again, the coal that moves in the world markets is a variable product, and there may be a very narrow range in which the receiver will accept the product.

So coming back, we have a series of costs that are involved in moving and that cost very often is distance related, or a large part of that cost is distance related.

Mr. BROWN. But how does the increase in distance cost relate to the portside costs; the increase in unloading and reloading cost versus the cost of unloading directly onto the ship, how do those two things relate?

Mr. KIMMERLE. All right, I think that we can go through several senarios that we have developed, and these are based on some internal work that we have done at Conrail, and I am somewhat hesitant to say that this is fact, but based on our forecast, and our forecast only.

Coal moving from Ohio to the east coast, by rail, and moving to our facilities in Philadelphia, will move in the neighborhood of $13 to $15 a ton.

Coal moving from Ohio, down the Ohio river to the gulf, the cost would break down something along the bottom lines, assuming that there was a rail or a truck delivery to the river, we anticipate that the initial leg of that would be $4 to $6, for the initial—from moving from the mine to the river.

We anticipate that a transfer cost from land to water on the river, be in the neighborhood of $1 to $2 per ton. That barge cost, the—gulf, would be in the neighborhood of $10 to $12 per ton, and that the transfer cost at the gulf would be in the neighborhood of $2 per ton, which would mean a delivered cost to the Gulf of Mexico in the neighborhood of $17 to $22 per ton, going by river.

We have also tried to do some costing or some anticipated cost on moving Ohio coal via the Lakes, and this would be probably through our Ashtabula facility on Lake Erie.

There we would anticipate a rail rate in the neighborhood of $10 a ton. We would anticipate a transfer charge of $1.15 a ton. That is a $1.15, in looking at the printed copy received, it is not $1.15 to $15 it is $1.15.

We anticipate that the move from Lake Erie to Quebec by barge or by lake vessel, in the neighborhood of $7 a ton, and transloading in the Quebec area at $3 per ton, total cost of putting a ton onboard vessels would be in the neighborhood of $21 per ton.

Does that give you a sense of the variation in prices as we see it?

Mr. BROWN. I am a little bit unclear, and I don't want to labor these figures extensively, why it is $4 to $6 to move the Ohio coal to the river, versus $1 to $5 to move Illinois to the river, is it just that there is more coal located closer to the river?

Mr. KIMMERLE. It is the proxmity to the river, it is the distance.

Mr. BROWN. And the difference between the barging from Ohio to New Orleans, versus Illinois to New Orleans is just a matter of the extra few hundred miles that it goes upriver?

Mr. KIMMERLE. And I believe that there is also some capacity involved there also, the size of barges and what not.

I am not in a position to speak directly on that.

Mr. BROWN. We can find that out when we get barge people to testify.

And is it a distance factor from the Ohio coalfields to the lake by rail?

That makes it $10 versus $4 to $6 to the river?

Mr. KIMMERLE. Yes; it is.

Mr. BROWN. The—well, let me go to another couple of questions here——

Mr. WEBER. Congressman, may we stall on that for just a minute?

Mr. BROWN. Surely, yes——

Mr. WEBER. Not only the distance factor is involved, but the changing of crews and terminal handling and all the additional charges that come about as a result of handling it a further distance.

And before when you mentioned demurrage, you mentioned railroad car demurrage, I think what the first panel was talking about primarily, was ship demurrage.

I have the feeling that they have not had any extensive expenses in rail demurrage of the cars waiting at the dock, it had been the vessels waiting to load that has been the big expense.

Mr. BROWN. Do you agree with Mr. Arnett that that is laid to the shortage of the coal supply at the source, or is it a function of dock space?

Mr. WEBER. The fact that the vessels are waiting?

Mr. BROWN. Yes.

Mr. KIMMERLE. I think that I can respond.

In Philadelphia, we have a different situation, than I think I've seen in other east coast ports. Conrail, earlier in 1980, made a $5 million expenditure on the reopening of our north side of pier 124, so we were able to expand our capacity at the port, being in response to increased demands for Pennsylvania coal.

We also have a different structure, in that the vessel size that we can handle is significantly smaller than some of the other ports, so we have some market factors that limit our ability to compete in the world's markets right now.

One is the availability of 40,000-ton vessels. We are competing head on with the Chinese grain exports moving out of New Orleans through the Panama Canal.

Mr. BROWN. In 40,000-ton vessels?

Mr. KIMMERLE. In 40,000-ton vessels, so there is an availability factor for vessels.

We also have a coal quality consideration, in that the Pennsylvania coals are not the low sulfur premium coals that we are seeing move out through the Southern ports.

With that, we have a number of factors working in—market one, we have increased our capacity.

Two, there is some limitation on the availability of vessels, and three, we have a different market for our coal.

Mr. FLORIO. If the gentleman will yield.

For all of those reasons, doesn't that dictate some degree of prudence, particularly in as much as we are talking about public expenditures in the peir 124 expansion program?

Mr. KIMMERLE. No, sir; the pier 124 expansion will have a significant impact on our ability to compete in the world markets.

First, at the present time, because of the configuration of the pier, we are restricted to loading 40,000-ton vessels. With the expenditure that we would——

Mr. FLORIO. How much depth is a vessel of that sort requiring?

Mr. KIMMERLE. The depth isn't a factor in this consideration, the loading chutes at the pier are fixed, they are stationary, so it is the size of vessel that we can get underneath them that is the constraining factor.

With the new facility, we will be able to fully load vessels up to the 60,000-dead-weight-ton class.

Mr. FLORIO. How much depth do they take?

Mr. KIMMERLE. They would take less than 40 feet, and we'll be able to partially load vessels up to the 80,000-ton class, so that our ability to compete in the world markets will be expanded.

We also have seen, and identified a market for Pennsylvania coal, and we are actively and aggressively selling Conrail capacity into that market. One of the markets that we have identified is Spain.

There are other European markets where the coal will move. In addition, the pier 124 facility will handle domestic traffic. They have recently seen that New England Electric, a major domestic utility, is looking to move coal through pier 124 in Philadelphia.

So we're not looking at a single market, we're looking at multiple markets, and we're looking at—one, we have a larger demand factor, domestic and export, and two, we're increasing the size vessels that we can handle.

There is a market there, and we anticipate that the market far exceeds our loading capacity with the new facility. So much so that we are anticipating at least one, possible two other major port announcements in the near future. Not Conrail owned and operated.

Mr. BROWN. It strikes me that the port situation is a little bit like the truck size highway situation, that the bigger the vessel, the more limited the number of ports it can go into, and if you are in Rotterdam and have a deep draft port, then your problem is that you can only pick up coal at the deep draft ports where coal is generated, and so you may only have a Rotterdam to Australlia trade, if Australia is as I think it is, the country that has the most deep draft ports, is that fair?

Mr. KIMMERLE. We have one undeveloped deep draft port in the southern part of Delaware Bay, where we can handle 140,000-ton vessels, without dredging.

Mr. BROWN. Where is that?

Mr. FLORIO. I'm sorry, I didn't hear what you said?

Mr. KIMMERLE. There is an area off of Delaware, the Lewis Bigstone Beach area in Delaware, that is capable of handling 140,000-ton vessels.

Mr. FLORIO. Is this the terminal island proposal that has been talked about from time to time?

Mr. KIMMERLE. This is——

Mr. ARNETT. Is north of there—you mean when they are going to develop the staging area for the Baltimore Canyon exploration?

Mr. FLORIO. Yes.

Mr. ARNETT. This is north of there, but part of that same deep gash that moves up the Delaware Bay. The Maritime Administration has examined this area of Delaware, it is absolutely amazing, it is a natural, deep harbor——

Mr. FLORIO. And what is Conrail's involvement in this project?

Mr. KIMMERLE. Conrail does not have an involvement presently. I think our preference would be to have made a deep water facility in the Port of New York for competitive reasons.

Mr. ARNETT. It is a gleam in our eye.

Mr. KIMMERLE. It is a gleam in our eye, I am just saying that there is within the east coast of the United States, deep water, it is not the only—Australia is not the only people who have deep water available.

I think New York would be a more suitable site for northern——

Mr. BROWN. Except that there is a problem with the availability of land for coal ground storage in New York. Given the real estate values in New York, unless you are going to rent rooms in a hotel, storing your coal on ground would be very difficult.

Mr. KIMMERLE. That is not a problem. There have been identified a number of sites that are capable of handling coal in the Port of New York.

There are some significantly large acreages on the New Jersey side the Long Island side—I'm sorry, the Staten Island side—that could be used for loading coal.

Mr. BROWN. And there is no problem with congestion of the rail service in that area?

Mr. KIMMERLE. No; the rail service to the Port of New York, we could provide excellent service; in fact, that is why we are looking at the port as a prime area for deep water access for Pennsylvania and possibly Ohio coals.

Mr. BROWN. Let me try to get more general in this now, again. If the port from which we export has a shallow draft, you serve shallow-draft vessels picking up the coal, but there are also shallow-draft ports where the coal is wanted, you mentioned China, that is true. Is it not also true in northern Europe, and in the Scandinavian areas of Europe, where, if you had a deep-draft port in New York, or a deep-draft port in the Delaware Bay, you could not load that ship and deliver it in Scandanavian areas, because they just don't have the port facility in the area to receive it; is that fair?

Mr. KIMMERLE. That's fair. In fact, looking at the pier 124 expansion at Philadelphia, we are looking at that market. However looking at the world markets, and I think that it is important to remember that we are dealing with a world environment, where we are competing not only with our friends to the south, and the gulf coast, but we're competing with the South Africans, we're competing with the Australians, and we're competing with the Polish, who are in the back door of the European steam coal market.

We are competing with the South Americans who could be bringing on substantial new productions in the next 5 years. I think some major coal production regions will be opened up in the next few years.

We're competing with the Chinese——

Mr. BROWN. Let me stop you at the South Americans.

The production facilities are one thing, but they have the same problem that we have, railroad facilities and port facilities, don't they?

Mr. KIMMERLE. The point that I am getting to is the cost per million Btu delivered, that is going to create the market—cost per million Btu.

If there is an economy receiving coal in a 100,000-ton vessel, or a 140,000-ton vessel, then, the ports that can serve those vessels will have a competitive advantage, and you will be able to bring more of that rent home to the domestic producer, the domestic transportation system.

So if there is an economy in ocean rates, then you can bring the market advantage to the domestic producer.

Mr. BROWN. I understand that, and also I gather that I am right in concluding that a ship transportation versus railroad transportation, in terms of time lost and demurrage, or cars being tied up at a facility waiting for the coal to be put in them or taken out, is not as costly an item as the rail delays; is that correct?

Mr. WEBER. No; I don't know of any rail delays. I mean we move the coal from the mine when it is loaded—it has to be loaded first.

Mr. BROWN. I understand, but if you are—what I am asking is, if you have a delay at the mine site while you are waiting to pick up the coal, or a delay at the delivery site while you are waiting to unload the car, is the impact of cost per ton versus the time of delay relatively higher, as the cost per ton than the ship delay?

Mr. WEBER. No, no, first of all, there is no significant delay at the origin point. The cars are put in there every day and the mine loads out. Unless they have had a breakdown or something, and the coal moves to the port on schedule, through the transportation department of the railroad which is handling it, who schedules this coal to be shipped from the mine on a certain day, to arrive when the vessel is expected to be loaded.

I mean it used to be when we expected the vessel to be here, and now it is when we expect the vessel to be loaded, so that there is good coordination of the rail portion of the haul to the port.

There is not this much significant delay or demurrage on railcars at the port, as I said before, which is x dollars per day, it is not the $15,000 per day that the vessels are suffering in demurrage for every day that they have to wait.

Mr. BROWN. Well, the $15,000 per day relates to the number of tons that it carries, doesn't it—I mean you have to reduce it down to a cost per ton.

Mr. GLENN. It's the crew size of the ship and those factors, and again, at hearings earlier this year, in the other body, there was testimony from one of the international coal merchants, fellows who do the buying for the European interests, whether they be steel or power-generating interests, that if there were additional coal-loading capacity at Baltimore and at Hampton Roads, that the number of ships waiting in line would increase proportionately.

In other words, if we had more than just one coal facility at Curtis Bay, we probably would have more than 30 ships off anchor below Annapolis. That there is a sort of a relationship here, given the unique nature of the surge of interest in getting U.S. coal.

Again, I am not prepared to go beyond that, but I do remember that testimony and I think that it is relevant to the discussion at this stage.

Mr. BROWN. Well, I am becoming less clear in my mind rather than more clear about the whole shipping proposition here.

If one talks in terms of cost per ton, it occurs to me that—and I want to say it again, and tell me I'm wrong again, if you will—that a smaller ship having to wait that may have per ton more crew on board, would be more costly for a 10-day wait, than a big ship, a large capacity ship; is that not correct?

Mr. KIMMERLE. I think that is not correct because there is more investment in the larger ship.

That's a portion of the function of the market, and right now we are seeing in a tight market, for the smaller vessels, that the demurrage may in fact be higher on a small vessel, simply because of the demand for the vessel.

So there are market——

Mr. BROWN. That is what I said.

Mr. KIMMERLE. Yes; there are market factors involved.

Mr. BROWN. The demurrage cost per ton, on a smaller vessel, the cost per ton will be higher; that is not correct though?

Mr. KIMMERLE. It could be higher on a smaller vessel.

Mr. BROWN. Or it could be lower?

Mr. KIMMERLE. Or it could be lower, depending on the availability of vessels.

Mr. BROWN. All right, now, let me ask this question.

Is that because the vessel may be a speculative shipper rather than a contract shipper?

Mr. KIMMERLE. We don't have speculative shippers in the port. Going back to the question that you asked earlier, of the producers, we will not register a vessel in the Port of Philadelphia, to berth at pier 124, unless we have a cargo identified for that vessel.

We do not have vessels coming into Philadelphia in anticipation of getting a load of coal. Transshippers make their vessel commitments 3 to 4 weeks in advance of the loading date, so it is an orderly flow of vessels into the port.

Mr. BROWN. Well then, the conclusion of your comment is that if we improve the port facilities, you would just have more people coming in to buy U.S. coal?

Mr. ARNETT. That was the testimony of one of the European coal experts at Senate hearings, Congressman Brown, about 3 months ago.

As of today, I don't know what the situation was, but that did come out on the record of those hearings, and I found——

Mr. BROWN. Now, I seem to hear two different things from Mr. Weber and Mr. Kimmerle.

One was that there was no trouble picking up the coal at the mine site, that the coal——

Mr. WEBER. There is no additional expense to the shipper.

Mr. BROWN. All right, but do you agree with Mr. Kimmerle that the problem is that there is not enough coal being produced from United States mines to meet the demand that is there from Europe or Japan or wherever the demand comes from, because you both told me, I guess, that there is no delay at the mine site, and there is not significant delay at the port of shipment.

Mr. WEBER. There is not a significant delay of the cars at port of shipment.

Mr. BROWN. Well, the delay is in what area then?

Mr. WEBER. The vessels. The vessels are being delayed.

Mr. BROWN. Now wait a minute, the vessels are stacked up waiting to be—waiting to get the coal. It is then either the capacity of your facilities or the capacity of the harbor, is that right?

Mr. WEBER. True, right, fine, if we had this double capacity right now, we could, needless to say, take twice as many vessels, and we could handle twice as much coal.

Mr. BROWN. But that wasn't the inference that I thought of Mr. Kimmerle's comment, which was that there was not enough coal being produced to meet the need, was that what you meant Mr. Kimmerle?

Mr. KIMMERLE. I tried to indicate that we are looking at two different markets, for coal.

In the Pennsylvania market, the Conrail-served territory, and I isolate the Conrail territory, which is Pennsylvania, northern West Virginia and Ohio.

We have found that transshippers, coal brokers are having difficulty in buying coal.

Mr. BROWN. The quality of coal that they want, or getting a——

Mr. KIMMERLE. The quality of coal that they need to fulfill their obligations.

Mr. BROWN. On getting a commitment that that coal will be produced in time, what is the nature of their inability to get the commitment?

Mr. KIMMERLE. They have been unable to obtain the coal that they require.

Mr. BROWN. That seems a direct variance with what the producers indicate.

Mr. KIMMERLE. Again, when I am talking about pier 124, I am talking about the Pennsylvania market, and I don't believe that you had a number of—let me back up a minute.

Understand the structure of the export coal business served by Conrail.

Conrail producers tend to be smaller in size, than producers found in other parts of the country.

Mr. BROWN. In other words, Consolidation Coal does not own land—coal land, served by Conrail, is that what you are telling me?

Mr. KIMMERLE. No; Consolidation Coal does, but the coal moving into the export market, off of Conrail, is not, by and large, moving from the Consolidation Coal origins, or the big producer origins, it is moving from the independent coal producers, scattered through Pennsylvania.

Mr. BROWN. Why?

Mr. KIMMERLE. The structure of the industry in Pennsylvania, we have Consolidation Coal and some of the other major producers in the western part of the State, who have essentially committed their existing capacity to other users, so that they are not in the market as much as the independent producer who does not have a contract and has not committed his production.

Mr. BROWN. In the export market?

Mr. KIMMERLE. In any market.

Mr. BROWN. Can they increase their production?

Mr. KIMMERLE. They can increase their production, except that they are running into a number of considerations right now.

Mr. BROWN. Capital needs?

Mr. KIMMERLE. They had just come out of 1979, which was not a particularly good year for the coal industry. They are also facing extremely high interest rates. As a former banker, I knew that the banking industry was very hesitant to lend money to the independent coal producer who did not have a long-term contract to sell his production.

Mr. BROWN. Is the independent coal producer the last in and first out of a market?

Mr. KIMMERLE. In the export market, no, again it comes down to understanding the structure of the coal industry.

You can sell coal in two means. You can design a mine and go out and sell the total production of the long-term contract, and that mine is then committed, say to a powerplant or to a particular export customer.

The major coal companies have tended to operate under that scenario. So, they don't have large amounts of excess capacity available, at least in our market, for the rapid escalation and demand for export coal, served by Conrail.

The independent producer has tended to be more of the entrepreneurial sort, more of a risktaker, more of a—capitalizing on a good situation.

The export market has grown very quickly, and I think the independent producers in Pennsylvania have responded in, so that the independents can respond more quickly to changes than the large producer, if they can get the capital.

What we are seeing now and what I perceive that we are seeing now in the Pennsylvania market, is that the independent producer at this time, can't respond because of the lack of capital available to them, because of extremely high interest rates, for one thing, they simply can't afford to pay 22 or 23 percent interest.

Mr. BROWN. Let me ask just a couple of questions to try to nail that down. I gather what you are telling me is that the independent coal producer can respond more readily to the spot market.

Mr. KIMMERLE. That's true.

Mr. BROWN. And that the large coal companies respond more readily to the contract market, long-term contract market. But why can't you be broker, buyer, and producer? If you have a capacity demand from the peculiar buyers that are using the Philadephia transshipment port, why can't you go to Consolidation Coal and say, if they have unused capacity, we have got these demands that are not being met; Tell a coal producer that there are ships waiting for the coal to arrive and link up as a common carrier, link up the supplier and the demander into something that serves your purposes.

Is there anything wrong with that?

Is that improper?

Mr. KIMMERLE. I think, as a common carrier, Conrail's business is the transportation of coal and the——

Mr. BROWN. In other words, you are not in the marketing business?

Mr. KIMMERLE. No, we are not in the marketing business, and we would be in fact, competing with a number of our customers if we did that.

Also, the coal producers, the majors, have their own brokerage organizations, so I don't think that it is Conrail's business to be selling coal to other people.

Mr. BROWN. Does Chessie have a different position on that, being in a somewhat different capital source position?

Mr. WEBER. No, no, we're not permitted to sell coal.

Mr. BROWN. Wait a minute, let me get the answer from Chessie because I am not hearing what you are saying.

Mr. WEBER. We are not permitted to mine or sell coal. This is a function of the coal companies, and I might add, that if there is any unavailability of coal, I would think it is at a certain price.

Mr. BROWN. But you don't have a telephone that is just connected with the buyers and another telephone that is just connected with the sellers, couldn't you get them on the same line and let them talk to each other, if you are the ones that are moving the coal from the seller to the buyer?

Mr. WEBER. If there is a contract to be entered into, and someone wants to question a freight rate, we are happy to sit down with both the seller and the buyer and discuss freight rate potential, but this—we're certainly very happy to haul the coal when it begins to move, but this is the limit of our functions.

Mr. ARNETT. We would probably be doing our railroading from Allentown, Brownberry, Eglin Air Force Base and a few other prisons, under the Elkins Act——

Mr. BROWN. You're not allowed to do this then, is that what you are telling me, you are prohibited from doing it?

Mr. ARNETT. Absolutely.

Mr. BROWN. So you sit there——

Mr. ARNETT. And with all of that antitrust prospect there, it is scary. We couldn't do that.

Mr. BROWN. All right, you sit there with a buyer who is saying, where can we get some more coal, and a seller who is saying, where can we sell some more coal, and are inhibited by Federal law?

Is that right?

Mr. ARNETT. I'm not so sure that we would sit there in that precise situation.

Mr. BROWN. But I think that is what I am hearing, now, maybe I am not, maybe I am the only one up here who doesn't understand this. But I get the impression from the coal companies, that they have got excess capacity on the order of 100 to 200 million tons.

I thought I heard from you, Mr. Arnett, that you have got people out there anxious to buy it, but you're not able to get the coal from the producer?

Is that not what you testified to?

Mr. ARNETT. This is what Mr. Kimmerle said for that one specific pier 124.

Mr. KIMMERLE. For our market, and when you talk about having a——

Mr. BROWN. What makes your market different in that regard?

Mr. KIMMERLE. All right, when you talk about 100 million tons of excess capacity, that includes Wyoming production, Utah production, it includes West Virginia production, it includes Kentucky production.

Mr. BROWN. Let's assume that there is some excess capacity in the areas that you serve.

Mr. KIMMERLE. It is not a perfect market, and also it is a matter of having coal at the proper quality available at the proper time.

Mr. FLORIO. If the gentleman will yield. But if the independent producers can do it, and I'm familiar at least in your situation in Philadelphia, with some of the workings that are going on to plug in, for example, the South Jersey Port Corp., with an independent producer with Conrail. Why is it that the large producers don't do the marketing?

Mr. KIMMERLE. What I am saying is that we have in the neighborhood of 14 transshippers, shipping coal through the Port of Philadelphia. Of that group, some of those transshippers have experienced

difficulty in obtaining the coal of the qualities that they require to fulfill their export commitments.

I am assuming that either two things are happening, either they don't know their business, and since some of them have been in business for 20 or 30 years, I don't feel that is the case, or there is a shortage of particular types of coal available.

We may be talking about a 1-percent sulfur coal, with a certain specification, certain ash content. It is a matter of having the right product at the right time.

Mr. BROWN. Is this a business that has a lot of brokers in it?

Mr. KIMMERLE. Yes.

Mr. BROWN. Well, let me go to just one final question, I think, on this issue.

The new rail deregulation law allows railroads to contract to guarantee delivery dates, and gives the railroads negotiating ability, resulting in more efficient coal transportation costs, presumably. Have any of you been able to use that effectively up to this point?

Mr. WEBER. That was any contract rates since the innovation of the Staggers Act, no; I mean this is not to say that they aren't being considered and discussed, but nothing has been finalized.

Mr. BROWN. And the unit train concept, I think, was testified to earlier, that you are both using the unit train concept?

Mr. WEBER. Very slightly, I mean—we just don't have the layout that the Western railroads do, they have very, very large mines, and larg-econsuming points, and a long distance in between, and they have point-to-point unit train rates.

Both ours and I think I can speak generally for the Eastern railroads is that it is just a different kettle of fish, and a different line of railroad.

Unit train rates do not lend themselves as well in the East as they have in the West. Yes, there are some unit train type rates established.

Mr. BROWN. So you are sending one or two cars up the hollow to pick up from some independent mines or some small mine sites owned by a large corporation, and then aggregating them later on?

The unit train rate does not apply?

Mr. WEBER. We're assembling them, yes; we have some rates that apply on coal, gathered, at Russell, Ky.

Or at Shelby, Paintsville, or Martin, Ky. These are trainload rates, 7,200 ton rates to Chicago, for example.

Our Kentucky field is spread out just the way that Conrail's Pennsylvania field is spread out, and they are very small operations that take a lot of special care.

Mr. FLORIO. What is the mileage breakpoint that justifies the unit train rates?

Mr. WEBER. It depends upon the cost, the method of handling, what efficiencies can come about, there is no formula, unfortunately.

Mr. ARNETT. It depends on long-term continuity, because the unit train is nothing but a conveyor belt, and the reason that you give that low rate, is that you literally dedicate 100 cars to that particular purpose, and we respond to that market in that way.

For instance, we have dedicated trains for Philadelphia Light. We have dedicated trains for Delmarva Power. Delmarva Power goes out, enters into long-term contracts in Greene County, Pa. or Garrett County, Md., and they literally bought one unit train of their own, and we supply another.

We put power on theirs and power on ours, and we just keep that thing rolling like a conveyor belt. We take it down and empty it and take it back to the mine, day after day.

Mr. FLORIO. So for example, a proposal that you may be familiar with, is Atlantic City Electric, is considering constructing a coal-fired electrical facility in Millville, N.J. That would be the type of facility that would lend itself to——

Mr. ARNETT. If they could get a long-term source of coal.

Mr. KIMMERLE. I think maybe it is—a unit train rate is based on the economy of operation. It means that we can take 100 cars and make a train out of it, attach a locomotive to one end and a caboose to the other, and then send it out to the coalfields. We can take it to a single mine, they will load the entire train, very often in motion, so they will load 100-ton hopper cars at once. The train will continue to move out on the main line, back to the dumper at the utility or at the port, be dumped automatically, and then move back out, so it is in continuous motion.

That is the concept of the unit train. Now, there are very few mines in Pennsylvania, and I believe in the east coast who are capable of loading at those rates.

Once you back off from the unit train concept, and come down to having to deliver maybe 50 cars or 25 cars or 10 cars and going back with the locomotive and picking up those cars and bringing them into the yard and taking the next 25 out.

This adds substantially to crew costs, to switching costs, so we are saying that unit train rates, right now, don't exist simply because the structure doesn't exist for export coal.

Pier 124 is not the design, nor capable of handling a trainload on a continous basis. We have to break it, yard it and in fact, the producers coming into 124, are not capable in most instances, of loading it.

What Conrail is prepared to do, is that we are individuals, a corporation to build private facilities. We will quote them volume rates, based upon a limited number of loading points in the coalfields, and a very rapid turnaround point at the pier.

So Conrail is moving toward the structure of volume rates to privately owned facilities.

Mr. BROWN. Could you for just a minute, try to relate the train to the ship to me, will you?

A unit train will load how many ships or vice versa, how many unit trains go into a ship?

I realize a unit train is a variable length, but could you relate the car capacity and the ship capacity to me?

Mr. ARNETT. A unit train is of a specific length. It is 100 cars of 100 tons apiece; 100 cars dedicated to a train, loading a 40,000-ton vessel.

Mr. KIMMERLE. A normal consignment of coal in Philadelphia is smaller than that. We will load two or three different producers or brokers' coal into one vessel.

Mr. BROWN. Wait a minute, I am getting 100 cars and 100 tons to a car——

Mr. KIMMERLE. OK, 100 cars, and 100 tons per car, per unit train.

Mr. BROWN. If my math is correct, that's 10,000 tons?

Mr. KIMMERLE. That's right.

Mr. ARNETT. You need 10 unit trains to fill a 100,000-deadweight-ton coal hauler.

Mr. BROWN. All right, now, let me go back for a minute then, are you both testifying to the fact that there are no car delay problems in terms of the port facilities, but it is a ship delay problem——

Mr. ARNETT. It is a handling facility, the transshipper. We can't blame it on the vessels. I mean they are waiting there, there is no problem in handling the cars from mine to port, the problem is in the number of the tonnage that can be handled via the existing transshipping facilities, the piers.

Mr. BROWN. So are you saying that it is a port facility problem?

Mr. ARNETT. No, not entirely; some of it has come about as I mentioned before, in the matter of some of the smaller mines not shipping in time, and you add further delay.

There has been some lack of coordination that has come up in this recent expanded market.

So it is a combination of things, it is not just one thing that causes it.

I don't think in our line, even though our physical layout is very much the same as Conrail's in Pennsylvania, that there has been any problem in finding the source of supply, at least not at the right dollar.

I mean if a broker goes out and tries a contract with an overseas receiver at a very ridiculously low price, and then tries to get the coal at that price, yes, then there is a problem.

Mr. WEBER. The ground storage facilities that are going in at the two principal tidewater ports that have been under discussion this morning, are going to eliminate some of this because they will create a ready supply in a fixed location, brought by rail to that location from a multitude of sources.

These are known, not to the railroad, per se, but to the coal company that is entering into the contract. These large coal companies have 25 mines, and they pull that coal of different quality and grades, into their particular contracts and into their particular meeting of a ship, to meet that contract.

Right now, that coal sits in cars and waits for the ship to get into the pier for loading. It will be, as I have—as it has been explained to me, under the ground storage facility arrangement, that will be loaded into piles of different kinds and grades of coal, and again, this will be up to the ship—excuse me, the seller of the coal to make sure that that coal is loaded into that ship.

Mr. BROWN. So the best combination would be ground storage facilities and a port adequate in size, to serve as many ships as possible, and improving rail facilities to bring in as many railcars as possible. So that when you have a track go out or a train wreck it does not have the impact that the train does not arrive at the time the ship arrives. And it would greatly simplify, not only your shipping requirements, and presumably reduce some costs, but it would also simplify the mix problem at the port. So that they could meet the needs of individual shippers as they come in to get the right mix.

Now, is it your feeling—and it has taken us a while to get to this point—but is it your feeling that streamlining the transportation system is a function of the coal marketers? Or is it a function of the rail carriers or of the port facility? Who is responsible for that?

Mr. WEBER. I submit that the free market determines that, and that is what has evolved this year. In other words, the coal producers, the people who are mining and producing and selling the coal have made that commitment, I think, in terms of the commitments for these ground storage facilities at these tidewater ports.

Mr. BROWN. But to the extent that we, the Federal Government gets into this, it tilts the game. Somebody pointed out, I think Ms. Holmes from the National Coal Association, she pointed out that it is the responsibility of the Federal Government to provide for the ports and harbors. That is not done on a private basis, for the most part in this country.

So if we are going to build the port and harbor facilities, we tilt the game, presumably, if we put it in New York, against Chessie, tilt it toward Conrail, or if we are going to do it at Norfolk-Hampton Roads, we tilt it toward Chessie and the N. & W.; right?

Mr. WEBER. Right.

Mr. BROWN. And it seems to me that it is going to be very difficult, although I may be wrong about this, if it is New Jersey, no insult intended, but there may be more space in New Jersey than in New York port facilities, but even more available in New Orleans or at Hampton Roads, to build the onground storage facilities; is that right?

Mr. WEBER. I think that there is—we are in a most favored position, Congressman Brown, because we have been in this business.

Basically, and I think this point hasn't been brought up, basically because the principal export of coal was for the metallurgical market, for metallurgical coal to make coke abroad.

That has been the historic export coal pattern with our railroad, in terms of why we have a Curtis Bay coal pier, and why we have a coal pier——

Mr. BROWN. That may not be true in the future, however, the steam coal increase may very well tilt the game to somebody else; is that right?

Mr. WEBER. As of this year, 65 percent of our export coals—this is for the entire Chessie system—is still metallurgical coal, 35 percent is steam—for steam purposes.

Mr. ARNETT. But now you heard the witness from the coal association testify that she expects that to slump next year, the metallurgical, but that the steam coal export business will presumably continue to grow.

Mr. BROWN. One thing I think is remarkable, and we haven't mentioned it, but all of this increase in both metallurgical and steam coal, has occurred at a time when you have got a general economic slump going on all around the world.

I still am unclear in my mind, whether that represents a rather dramatic shift over to the use of coal, or whether it represents dramatic shifts to the U.S. market from an Australian market, screwed up by a labor situation, or a South African market screwed up by shipping costs, or whatever the factors are.

That bothers me still, a little, and I don't know.

Mr. ARNETT. I think the basic reason for this is OPEC.

I think it's impact on Europe and that is where, from the limited knowledge that I have of the whole subject, Congressman, that's——

Mr. BROWN. Well, OPEC is not exactly predictable. The direction certainly is predictable, so there seems no prospect of the price of oil suddenly going down to the extent that the cost of coal, at it's present level, can't meet a need if people want to shift to that.

I think the thing that is perhaps more unpredictable, is the Government control of standards that affect the types of coal that can be purchased. But once again, the mixing facilities, it seems to me, serve the Ohio coal market, Illinois, and a couple of other areas. I want to add just one other tilt that could be put into the whole thing.

If we improve the port of New Orleans, it seems to me that we enhance the barge line traffic, and therefore tend to make important what Mr. Tostensen testified to, and that is that we have to be sure that the lock and dam system is efficient and effective in terms of transporting that way.

I think, Mr. Chairman, that that sort of brings us to a conclusion on that issue.

I have no further questions at this point.

Mr. FLORIO. Gentlemen, just one last point that I would like to raise. Have there been any overtures that you are aware of from either foreign countries or foreign companies to participate, financially, in port improvement projects?

Mr. GLENN. I think some of this has been released in the papers, yes.

Mr. FLORIO. Which, may I ask?

Mr. ARNETT. Savannah has foreign money in it, doesn't it?

Mr. GLENN. I would not want to say anything about that because I don't know——

Mr. WEBER. I think it's the—I have read in the newspaper, that the St. Joe Mineral interest, through Massey, in pier 9, is related to Royal Dutch Shell, or some Dutch company.

Mr. KIMMERLE: It's scallop——

Mr. WEBER. Scallopped, yes, which is Shell, which is Royal Dutch Shell.

So that all I know is what I read in the newspapers, but I have a feeling that there is foreign money coming into the port.

Mr. KIMMERLE. I know that there is, within our territory, significant interest by private corporations, in developing port facilities off of Conrail. I think part of that is because of the position that Conrail has taken with respect to expanding it's own port facilities and encouraging private development.

I can say that we have been approached and we have had discussions with the international coal market for developing privately owned facilities.

Mr. ARNETT. It is also probably because our property looks like such distressed property.

Mr. KIMMERLE. No; I think that it is the other perception, that it is—since the tail end of 1979, the word is going out to the industry, that Conrail is performing, that we have put our past away, and we have the tracks in shape, we have hopper cars and we have the locomotive power, so that the mines aren't waiting for cars, we are able to deliver the goods on time and we're developing that reputation in the world market.

We can actively and aggressively be selling that capability, and we feel that the liability of the future of Conrail is going to be heavily dependent on our expansion in the export market over the near term.

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It is one of the major growth markets for the corporation, and we intend to be there.

Mr. FLORIO. Gentlemen, thank you very much. We appreciate your testimony.

I would like to call the balance of our witnesses to the witness table.

I understand that some of them have been changed from the names that we have, but we have representatives from the Ohio River Co., the Toledo-Lucas County Port Authority, the Cleveland-Cuyahoga County Port Authority, the Council of Lake Erie Ports, Cast Shipping Services, and the St. Lawrence Stevedoring Co.

I would like those witnesses who represent these entities to come forward, please.

Please identify yourselves, and we will accept the prepared statements for the record and ask that in light of the hour, that you people proceed in a summary fashion, if at all possible.

Sir, would you perhaps start.

Mr. MACFARLANE. My name is Hugh MacFarlane, I am president of Cast Shipping Services, Canada, Limited.

Mr. FJORD. I am Hilliard Fjord, representing the Ohio River Co.

Mr. FOX. I'm Norman Fox for the Toledo-Lucas County's Port Authority.

Mr. LACHANCE. My name is Jean Lachance for the St. Lawrence Stevedoring Co.

Mr. SULPIZIO. My name is John Sulpizio, and I am representing the Council of Lake Erie Ports.

Mr. FLORIO. I think it may be appropriate for you to go forward, Mr. Fjord.

STATEMENTS OF HILLIARD FJORD, OHIO RIVER CO.; HUGH MACFARLANE, PRESIDENT, CAST SHIPPING SERVICES; JOHN SULPIZIO, PRESIDENT, COUNCIL OF LAKE ERIE PORTS; NORMAN FOX, DIRECTOR, TRADE DEVELOPMENT, TOLEDO-LUCAS COUNTY PORT AUTHORITY; AND JEAN LOUIS LACHANCE, PRESIDENT, ST. LAWRENCE STEVEDORING CO.

Mr. FJORD. Thank you. The barge line business is relatively new to the export of coal. The barge line businesses have been in the business of shipping coal throughout Midwest America for many many years, and a great deal of tonnage is moved that way, back and forth, up and down the Ohio and up and down the Mississippi. But, there hasn't been a great deal of export shipment using the Port of New Orleans, until recently.

The reason for the increased demand, of course, is the very information that has been given to this committee this morning, that there are so many problems at the Atlantic ports.

The delays, the expense and those things have contributed to the demand for and the use of the river transportation and the New Orleans port for the shipment of coal overseas.

This will expand. Our research people have gone into this in great depth, and we are confident that the export of coal out of New Orleans will increase substantially over the next 20 years. [See p. 101.]

We feel that there will be approximately 135 million tons of coal shipped from the port of New Orleans in the year 2000. Currently, the demand is only 7 million tons, and that demand is being met by the current facilities in operation, but there are also an increasing number of facilities that are planned and/or under construction.

There are several constraints against increasing the tonnage of coal going through the river system, through the Port of New Orleans. The major constraint at the present time is the depth of the channel in the southwest pass, which is only 21 miles of channel currently at 38 feet, whereas a depth of 55 feet would be required in order to bring the deeper draft, larger vessels up into the Mississippi River, in order to handle that transshipment effectively for overseas trade.

Another major constraint which has been alluded to, both here and in the other meetings, is the lock and dam at Gallipolis, Ohio, and Gallipolis Ferry, W. Va. A tremendous amount of coal tonnage coming out of the Kanawha River, needs to go through the lock and dam at Gallipolis, and of course all the tonnage coming down from the Monongahela, and the Allegheny, and the Pennsylvania ports, needs to come through the lock at Gallipolis.

That lock is experiencing tremendous bottlenecks at the present time, and as the demand for coal for export, through New Orleans, increases, that will be an increasingly difficult problem.

The barge industry has been lobbying considerably over the last 10 years to get that lock and dam rebuilt, and we hope that there will be some action in the next Congress to get that going foward.

With the addition of the large lock and the bypass at Gallipolis, we think we could handle the increased demand and capacity that the Port of New Orleans would be able to take care of.

There are some other constraints. If we get to the point where we realize a demand of some 200 million tons of coal out of the Port of New Orleans, some of the lower locks in the Ohio, in and around Cairo, would be required to be modernized or rebuilt, but at the present time, we think that the capacity of those locks can be increased somewhat up through maybe 1990, but if we get to the point of 200 million tons going through the river system, locks 52 and 53 would also have to be modernized in the lower Ohio.

Mr. BROWN. At Cairo, are those the same locks you are talking about?

Mr. FJORD. Yes. Smithland was modernized, but there are two others, locks 52 and 53, that do need some attention at the present time, and we will need to modernize them in the future, if we are to handle that increased demand.

There is one other constraint that the bargelines are very much concerned about, actually two other constraints—one is the availability of fuel for bargeline traffic; the availability of diesel fuel. During periods of shortages that have developed, the bargelines have been way down the list of priorities for the allocation of adequate and sufficient diesel fuel.

We do need to be allocated sufficient fuel to move the coal that will be required. A primary consideration of the bargelines for their future activities is to secure adequate allocations in the event of shortages of diesel fuel.

I might add at that point, as you are well familiar, the statistics that have been put together by the Department of Transportation and

many of the universities that have been asked to do this, have indicated that bargeline use of fuel is the mose efficient of any of the modes of transportation, even more efficient than a coal-slurry pipeline. It is 2½ times more efficient, per Btu, to move a ton of coal a mile by barge than by rail and about five times more efficient than moving the same ton of coal by truck.

If we are going to live with this kind of a decreasing availability of diesel fuel, we need to use the most efficient system, the bargelines, to move our coal for export.

Another constraint we are concerned about, and there is some attention being devoted to this, at the present time, is that for many years, there has been discrimination and lack of cooperation among the modes of transportation, where export trade is involved.

It has only been recently that there has been any indication that the rails have been willing to negotiate rates, where intermodal cooperation is required, or suggested for the transshipping of coal from mine by rail or by pipeline to the river, and by river barge to the gulf coast.

We need to make sure that the rails are cooperative in their determination of rates, where intermodal transportation is going to be the most efficient and the cheapest way of hauling the coal to the ports.

The rail witnesses have indicated, for instance, the rates that they would quote to ship coal from an Ohio mine to the Ohio River, would run anywhere from $4 to $6 per ton, a distance of only 100 to 200 miles, whereas they quote a rate of $10 to $12 per ton to run from the mine all the way over to the Atlantic Ocean, a distance of some 500 to 600 miles depending on the port.

That is indicative of the kind of discrimination in this intermodal rate completion. If the rails could quote a rate based upon the number of miles that they haul the coal from the mines to the Ohio River on a negotiated, cooperative basis, so that we can compete ratewise, for coal out of New Orleans, with coal shipped out of the Atlantic ports or coal shipped from Australia or coal shipped from South Africa. We need to be able to cooperate and we hope that the rails will consider more cooperation in devising an intermodal method of transportation at an attractive rate for the shipper, using the most fuel-efficient methods wherever possible.

Those are the things we need to work on to make sure that the bargelines can handle the increased load and demand.

The bargelines can raise the necessary capital. There is no question about their ability to raise capital. There are good methods of increasing capacity. They have available excess capacity right now and they can develop very readily increased tonnage capacity, both barges and towboats, in order to handle the increased demand that we see coming on the horizon. In fact, they are developing those programs of capital expansion at the present time.

Thank you.

[The following information was received for the record:]

SUPPLEMENTAL MATERIAL ON COAL TRANSPORTATION PROBLEMS

At the request of Congressman Clarence J. Brown, concurred in by Congressman James J. Florio, Chairman of the Sub-Committee, I attach herewith supplementary material to my oral testimony given at the hearing in Columbus, Ohio, on December 17, 1980. The following is a brief explanation of the attached schedules A and B:

Schedule A shows the cost of transporting coal from various U. S. Mining locations to the European port of Dunkirk in Northern France through the alternative ports of Norfolk, Virginia, and New Orleans, Louisiana.

The first column is for an all-rail movement of low sulphur, Eastern Kentucky, or Western West Virginia coal through Norfolk, Virginia. Of interest is the fact that the rail rate for export steam coal is 52¢ less per ton than the rate for the same movement of steam coal for the domestic market.

The next four columns reflect the cost of transporting this same low sulphur, Eastern Kentucky, or Western West Virginia coal through the New Orleans area using both rail (or truck) and barge movement to the port. Again, of interest is the fact that the rail rates for export steam coal in their portion of this movement are 61¢ per ton higher on the C & O and $1.65 per ton higher on the N & W than the rates of those companies for the same movement of steam coal for the domestic market.

The sixth column shows the cost of transporting Ohio coal through New Orleans. The seventh column shows the cost of transporting Western Kentucky coal through New Orleans. The eighth column shows the cost of transporting Southern Illinois

coal through New Orleans. Unfortunately all three of these sources produce higher sulphur coal, but with good BTU count.

The last column reflects the cost of transporting the low sulphur, low BTU coal from the Powder River Basin through the New Orleans area using rail to Metropolis, Illinois, and barge to the New Orleans area.

It is apparent from reading Schedule A that the basic cost of transporting coal to Europe through New Orleans ranges between $32.25 and $43.80 per ton as compared to a basic cost of $29.13 from Norfolk. However, this schedule does not reflect any charges for ship demurrage which is an additional cost of doing business through any of the East Coast ports. Demurrage charges currently being incurred by coal shippers on the East Coast are running in the range of $7.50 to $9.60 per ton and in some cases have approached $11.00 per ton. With the addition of those demurrage charges to the cost of shipping coal to Europe through Norfolk and other Atlantic ports, the New Orleans route has become competitively advantageous in many cases.

Dredging the channel through the Southwest Pass to the Gulf to a depth of 55 feet would give the midwest coal route through New Orleans a long term boast. The 55 feet depth would permit the use of larger bulk carriers in the 125,000 to 140,000 dead weigh tonnage range. Use of such larger carriers would most likely reduce the current rate to such an extent that New Orleans could compete effectively with Atlantic ports irrespective of demurrage costs.

Schedule B takes into consideration the current cost of various types of coal at the mine. Currently, the greatest export demand is for the low sulphur, high BTU coal from West Virginia and Eastern Kentucky primarily because it can be purchased today at very little premium cost over higher sulphur types. As demand for low sulphur coal increases and higher prices per ton become a reality, it is possible that European demand will shift away from the premium priced low sulphur coal and increase for higher sulphur, high BTU midwestern coal at lower delivered prices. If that occurs, midwestern coal from Ohio, Western Kentucky and Illinois shipped by barge through the New Orleans area will then become a significant factor in the export coal trade.

SCHEDULE A

COMPARATIVE TRANSPORTATION RATES TO PORTS

	Eastern KY. Western W. VA. To Norfolk, Va.	Eastern Ky / Western W. VA. To New Orleans - From Kahawha, W.VA. (Truck)	Huntington, W.VA. (C & O)	Kenova, W.V. (N & W)	Ghent, KY. (L & N)	Ironton, OH To New Orleans	Owensboro,KY To New Orleans	Metropolis, Ill. To New Orleans S. Ill. Coal	West. Coal
Transportation to River									
Rail	-	-	6.22 (4)	7.93 (5)	7.55	-	-	3.75	14.30 (7)
Truck	-	2.00	-	-	-	2.00	2.60	-	-
Transfer to Barge (2)	-	1.50	1.25	1.25	1.25	1.50	1.50	1.50	1.50
Transportation to Port									
Rail	13.81 (1)	-							
Barge	-	12.50	11.50	11.50	9.50	11.25	8.25	7.00	7.00
Transfer to Ship (3)	.42	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Total Cost on Ship	14.13	19.00	21.97	23.68	21.30	17.75	14.35	15.25	25.80
Ocean Freight Rate to Europe (6)	15.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00
Delivered Price (Excluding Cost of Coal)	29.13	37.00	39.97	41.68	39.30	35.75	32.35	33.25	43.80

(1) Average of C & O, N & W export coal rates for steam coal - rate on domestic steam coal are 52¢ higher at $14.34.
(2) Estimated.
(3) New Orleans rates include ground storage and transfer to ship. Rate is currently high due to lack of capacity.
(4) Rail rate on C & O of $6.22 compares to $5.61 for domestic steam coal and $5.26 for domestic met coal - export rate was substantially reduced on 11/15/80.
(5) Rail rate on N & W of $7.93 compares to $6.28 for domestic steam coal and $5.90 for domestic met coal.
(6) Based on quotes of 12/22/80 for 60,000 DWT vessels from Hampton Roads to Dunkirk. The same $3.00 per ton differential from New Orleans is applicable to most other European destinations - Ocean rates based on long tons.
(7) Based on 2.5 million tons annually.

SCHEDULE B

COMPARATIVE DELIVERED COST OF
COAL FROM VARIOUS SOURCES TO DUNKIRK

	Minemouth Price Of Coal	Total Transportation	Total Delivered Cost *
Low Sulphur - (Less than 1.5%)Eastern Kentucky/Western West Virginia coal via Norfolk, Virginia.	25.00	29.13	54.13
Low Sulphur - (Less than 1.5%) Eastern Kentucky/Western West Virginia coal via Kanawha River and New Orleans.	25.00	37.00	62.00
Low Sulphur - (Less than 1.5%) Eastern Kentucky/Western West Virginia coal via Huntington, West Virginia and New Orleans.	25.00	39.97	64.97
Low Sulphur - (Less than 1.5%) Eastern Kentucky/Western West Virginia coal via Kenova, West Virginia and New Orleans.	25.00	41.68	66.68
Low Sulphur - (Less than 1.5%) Eastern Kentucky/Western West Virginia coal via Ghent, Kentucky and New Orleans.	25.00	39.30	64.30
High Sulphur Ohio coal (Over 3%) via Ironton, Ohio and New Orleans.	20.00	35.75	55.75
High Sulphur Western Kentucky coal (over 3%) via Owensboro, Kentucky and New Orleans.	18.00	32.35	50.35
High Sulpher, Southern Illinois (Over 3%) coal via Metropolis, Illinois and New Orleans.	18.60	33.25	51.85
Low Sulphur Powder River Basin (Less than 1%) coal via Metropolis, Illinois and New Orleans.	8.00	43.80	51.80

Eastern Kentucky/West Virginia coal is 12,500 BTU per pound, Ohio and Western Kentucky 12,000 BTU per pound, Illinois coal 11,500 BTU per pound and Powder River Basin Coal is 8,500 BTU per pound. Source - Coal Outlook - 11/10/80.

* Excludes demurrage charges.

Mr. FLORIO. Thank you very much.
Mr. MacFarlane.

STATEMENT OF HUGH MacFARLANE

Mr. MACFARLANE. Thank you Mr. Chairman, Mr. Brown, it is a privilege, as one of your cousins from north of the border to be invited to attend these hearings.

I must apologize that my own schedule in the last few days, and the short notice I had of this, results in my probably giving you some somewhat disjointed thoughts.

First of all, I should explain that my company is part of an international shipping group, which is owned by Canadians entirely. Approximately 25 percent of our shareholding is owned by Canadian National Railways, which is a Government entity in Canada, and the other 75 percent is owned by private individuals.

My position in the company, as the senior North American shipping representative—we are extensively involved in ocean transportation, in both dry bulk and oil trades with vessels ranging in size from 25,000 tons up to 260,000 tons.

The potential of a movement of coal from the middle west area of the United States, to particularly Europe, by the Great Lakes route, has been one which has interested us only for a comparatively short time. It has become very directly evident that the substantial increases in coal demand are such that in the next few years, any alternatives of the problems that are involved in Hampton Roads, particularly right now, must be looked at. The more that we have investigated this situation, has shown us that not only is the Lake Erie route viable, because of the particular problems related to extra costs of demurrage in the Hampton Roads area.

Not only is it viable in the immediate future, further, it is viable on a long-term basis.

Now, how do we do this? We—our company is also involved in container ships, which provide us with door-to-door service. What we are intending to do in this coal movement, is to provide at least a port-to-port service. This means that we will cooperate with the lake companies who have the lakes freight to take, what we call, from Lake Erie ports down to Quebec.

We will cooperate with St. Lawrence Stevedoring Co. in Quebec, which has a very good facility there, which Mr. Lachance will tell you about, which I should hasten to add, that we have recently acquired, at some considerable cost, which emphasizes our belief in this movement. We will then carry from Quebec, overseas, in our own ships, so we will be able to provide a through route from the Great Lakes for coal on the oceans.

In 1979, approximately 114 million tons of coal was moved by sea. In 1980, the figure will be totally up to about 117 million tons. Most of this is coming from the major exporting companies—countries, which are the United States, Australia, South Africa. Canada, to a smaller extent, and Poland, again, to a smaller extent, particularly in recent months, for reasons which are apparent.

The figures which are suggested by a number of peoples, go up to—by the year 2000, anywhere between 1,000 million and 2,000 million tons of coal being moved on the worlds oceans by the year 2000.

Whenever—even if you go down to a more conservative estimate of maybe 600 or 700 million tons, the—you are still talking about a fourfold increase from what is happening right now.

Where is this coal coming from—we believe that in the immediate future, the United States is the only country, which can move rather rapidly into increasing it's coal exports.

We believe that South Africa and Australia, they probably need another 5 or 6 years, with their plans for their interstructures, which could result in—at that stage, their doubling their present capacity.

What have been the restrictions this year, and what are they going to be in the immediate future, basically, they are restrictions of the facilities in the Hampton Roads area, and in other areas in the States.

The first and foremost in these restrictions, is the lack of deepwater berths.

We are talking about somewhere around 45 feet in the Hampton Roads area, and we are talking about somewhere around 38 feet in the New Orleans area. What does this mean, it means smaller ships.

Dredging and other port facilities, and we read a great deal about these, and I'm sure that there are a lot of them coming along, but when you talk 2 or 3 years down the road, I think realistically, we are going to see them dropping back a bit, because these new facilities need something which they don't have now, and that is the area of storing and assembling coal. This of course, is one of the problems behind that congestion.

That results in environmental problems, which become more difficult to overcome and take longer to overcome than merely providing new port facilities.

Dredging is also another environmental problem. I hear talk about Hampton Roads going down to 55 feet, now, please don't consider me an expert on this, but I understand that if Hampton Roads goes down to 55 feet, there is a big tunnel which goes under the harbor there, and there won't be very much room between the top of the tunnel, and the 55 foot of the ship going over the top of it.

Dredging New Orleans down to the 55 feet from the southwest pass, I believe, is an enormous project. I am sure that it is going to come, but this is the big restraining factor in American coal exports.

What we have immediately in the Quebec area, and could have, of course, more of in the years to come, is a deepwater facility. We already have something over 50 feet, the difference between 45 feet and 50 feet, means something like your average shipload out of the Hampton Roads area is now somewhere between 60,000 and 70,000 tons.

There are the occasional larger ships loading coal for Japan, who then go to South Africa and fill up, but the average ocean load is somewhere between 60,000 and 70,000 tons.

As soon as you get up to 50 feet, you are getting—with existing ships, a capacity of somewhere between 100,000 and 110,000 tons in one ship. My company, among other international shipping companies is looking at new designs, and we have a new design combination carrier which is a ship which can carry both oil cargo's and dry bulk cargo's, which will have a capacity of 150,000 tons on 50 feet.

The more cargo you can put in the ship, the lower your ocean freight expenses, it is a simple, supermarket equation.

We believe that the movement via Lake Erie is probably going to grow within a few years, to close to 10 million tons. There are a number of restrictions on this, the first and foremost is the restrictions of the presently available Great Lakes fleet capacity, which is going to have other requirements on it, particularly in the grain trades, plus to a lesser extent in the oil trades. It is difficult for one to tell, but it again, emphasizes what some of the previous people were saying, that the desire for long-term contracts. People are not going to build ships at the enormous capital costs, against seeing possibly a year or 2 years employment. We must see longer periods than that.

An ocean freighter—a lakes freighter built in Canada now, costs somewhere close to $50 million. This is the type of ship which can go down through the seaway.

The ocean ships which are—which we are building, right now, which will carry 155,000 tons, are costing somewhere around $60 million, which is a false price because the shipyards are subsidized and they have been hungry for business in recent years.

Mr. BROWN. What was the figure?

Mr. MACFARLANE. Around about $60 million per unit.

Mr. BROWN. Only $10 million more than the lake ships?

Mr. MACFARLANE. Right, it is an interesting comparison, that the price of that type of ship, we believe, is liable for more or less double in the next 2 or 3 years, simply because the demand for new ships is going up, and the shipyards themselves will be able to charge a more realistic price and something which is closer to what their actual costs are before they are subsidized in various ways, and before they go into a loss situation.

One of the other points that I should make, of course, as Canadian National Railways are a major shareholder in our group, they are themselves looking at the unit train concept from this area of the United States, down to the bay cities as a back up, for the transshipment by laker.

I really can't answer any great intelligent questions that you may have on that proposal, but I do know and I have had some discussions, if you would permit me, I would like to make one or two points about the congestion in the Hampton Roads area, which I was somewhat puzzled about, and I have noticed that Mr. Brown has also been puzzled about this.

It didn't seem to be the railways fault, and it didn't seem to be the mines fault, which left the ships. Now, ships don't go and sit in a port for 40 or 50 days on end for fun. They normally get a demurrage rate, which is a negotiable thing, the same as the ocean freight rate, but it doesn't really cover their out of pocket costs, and the way that this works further, the shipowner himself is working on a contract, or a spot market for him, is that he has some agreed dates, during which he has to present his ship.

In our trade these are known as laydays, and they are usually, they can be very tight, or they can be over a period of 15 to 20 days, and the shipowner has to present his ship within that period. If he is late, then the shipper has the option to say he won't take the ship.

We have had numerous occasions this year in which our ships which range in size from 50,000 up to—in terms of actual coal lifting—from 50,000 up to close to 100,000 tons, have waited in Hampton Roads for periods of 4 weeks, up to over 8 weeks.

We don't like to have any more than anybody else, but we—maybe you would like to ask me some more questions. Certainly the ships themselves are not contributing. I have understood that one of the contributing factors this year, has been that there are numerous grades of coal which are put together in one ship, and we have had occasions in which our ships have been waiting there, in which 95 percent of the coal has been there, and the ship is waiting for the other 5 percent.

One suggestion that I am inclined to preach when I talk to American exporters, is whether it is coal or other commodities, is that they might well look at sailing CIF instead of f.o.b. We have been very active in discussing these potentials of this coal movement, but most of the discussions that we have had up to date, have been with the large European importers of coal, whether they are in the steel industry, or in the power industry, or in a lot of cases, the major oil companies are becoming involved in this.

But it surely seems to me, that the shippers are supplying the coal. They do have the control over getting it to the ports. If they have control over that, and they have control over the ocean freight, they have a much greater control over the whole movement to its destination.

Major American exporters have had a reluctance over the years, to get involved in CIF sales, and I think that it would be appropriate for some of them to look a little bit more closely at this.

Thank you very much.

Mr. FLORIO. Thank you very much.

Mr. Sulpizio.

STATEMENT OF JOHN SULPIZIO

Mr. SULPIZIO. Thank you very much. Mr. Chairman, Congressman Brown, and members of the committee, I would like to tell you some good news and then give you some bad news at the same time.

In the way of boasting, it is important to tell you that we have, in the Great Lakes Seaway system, increased to close to 40 million tons of coal moved in calendar year 1979, and we look forward to a good 1980.

The interesting part about that figure is that it actually represents about 50 to 60 percent of the capacity of the port system in the Great Lakes.

We admit that a large portion of that coal movement is domestic, so it's all in the lake, but it represents a statement of capacity.

We would like to brag a little bit about our dock facilities. The operators and the shipowners represent some of the best that exist in the Nation. They have been moving bulk materials, including iron ore, taconite, gypsum, sand, and aggregates for decades. If you would pay a visit to Lake Erie, you would see some of the most contemporary vessels plying our lakes, some as large as a 1,000 feet or more.

You would see some of the finest docks. Specifically, we have Superior Transshipment Facility, in Wisconsin, and we have a new one for taconite coming on line in Toledo. We have a new one in Lorain, Ohio, also serving the steel industry.

It represents technology that keeps up to date with the needs of the port users.

Contrary to some other ports, we have quite a bit of ground space to accommodate the needs of prescription blending and ground storage. While we can boast about some of these positive aspects of our ports, I would like to point out some distinct disadvantages that we have.

While we have facilities and while some are underutilized, we do want and need capital investment in those facilities and the ships that serve them.

What I hear, as a front line economic developer, is that there is a general hesitancy to invest until the national policy states that we recognize that the Great Lakes works, and we are going to do whatever we can to support the Great Lakes and St. Lawrence Seaway system.

Mr. FLORIO. Capital investment toward what end?

Mr. SULPIZIO. Facilities, principally, and the updating and improvement of dockside improvements.

Second, it is often noted that our season is limited by virtue of our climate, and that the 9-month navigation poses a problem to European buyers.

Finally, much of what we hear is the negative impact and the disadvantage of the seaway toll system.

Perhaps, in the way of remedies, I might offer some humble recommendations.

In terms of supporting the Great Lakes and the St. Lawrence Seaway system, I think it is important to take national note that it does work. Federal reassurances, to the private sector, could take the form of accelerated depreciation to encourage investment into dockside facilities and new or retrofited ships.

Certain amendments on the issuance of industrial development bonds, could be legislated so that they are not limited to $10 million. In many cases, many of these facilities could cost $20 and $30 million.

Other encouragement could improve the situation. Your continued effort to invest in research and development would be beneficial.

We have heard quite a bit today about the need for blending our Ohio coals and providing more cost efficient cleansing systems to remove the economic constraint to the buyer on the foreign end.

We, experience some strange things. I know one experience where an application was submitted for a feasibility study to pursue coal blending to three seperate funding sources, and unfortunately it was denied all three times.

Yet, we recognize that these are going to be critical studies to validate the merits of the use of Ohio coal.

In terms of the consumption and export of Ohio coals through the Great Lakes and St. Lawrence Seaways system, that research and development money can go a long way in determining how Ohio coal, which is high in sulfur, can be used in the synfuel process and made more marketable to foreign buyers.

We have to reactivate the analysis to extend the season for navigation. You will notice that I don't say year-around shipping. There are some practical needs we have for maintaining the system, but certainly I think we ought to continue to look at the extension of season navigation and ice control in the Great Lakes system.

We should look to the Seaway Development Authority, which is an agent of the Department of Commerce, as an agent to work in these areas. For instance, would it be possible to authorize the Seaway Development Corporation to build and finance transshipment facilities beyond the Welland Canal, where both western low sulfur and Ohio and midwest high sulfur coals could be mixed to meet the compliance needs of the European market?

We must look at expediting the planning process of the Corps of Engineers. A recent statement I heard from a corps official, was that it takes the Corps of Engineers to take a project from start to finish somewhere around 26 years. Not too long ago it was 18 years.

I submit to you that the Corps of Engineers, with all due respect to it's individual personnel are hamstrung with regulations. They are not really meeting the planning needs of the Nation for commercial or industrial navigation.

Mr. FLORIO. What type of a project are you talking about that would take that type of——

Mr. SULPIZIO. We're talking about port improvements, which might include a final recommendation on bridge alterations, railroad or highway, or it could be selected channel cuts, depth considerations, and the like.

They could be recommendations upon transshipment facilities that are not necessarily paid for by the Federal Government, but are built into the study.

They could be breakwater systems or marina locations.

Mr. FLORIO. If I could just indicate to you that I have had some experience with projects undertaken by the Corp of Engineers. Certainly some of us become frustrated with the time, but it certainly doesn't approach anything like the time frame that you are talking about. We've had dredging of the Delaware that has been completed in 18 months, which we are unhappy about, but it took 18 months. But certainly to keep some sense of reality, 26 years is something that I have difficulty contemplating.

Mr. SULPIZIO. As another example, if I may, Mr. Chairman? In the Port of Lorain, Ohio, where we are pleased to be working on a study of navigation improvements, we commenced in 1977. We are in 1980, and the feasibility study won't be completed until 1983. And the corps admits that there is strong possibility that it won't be until 1990, or later, before the first phase construction is funded. I certainly don't want to overemphasize this issue as the overriding problem; however, it is one that we must look at.

Finally the capital debt of our St. Lawrence Seaway, should be converted into equity so that toll increases do not serve as a disadvantage.

Legislation is required for this conversion. In talking about this issue with many folks, and listening today, which has been a very productive experience for me, some may get the impression that we are trying to compete with the east coast, the barge systems, and our friends in the gulf. Please don't feel as if we are here before you today competing for your attention, because I am sure that the Congress of the United States wants to develop a very comprehensive and unified plan of action to take care of the problem.

There is enough coal export demand to go around. I think that the Great Lakes and the St. Lawrence Seaway system can be one of the avenues for us to meet that demand. We simply wish equal opportunity.

Thank you.

Mr. FLORIO. Thank you.

Mr. Fox?

STATEMENT OF NORMAN FOX

Mr. Fox. Thank you. Yes, Mr. Chairman, Mr. Brown.

My statement includes several appendixes, one of which deals with the water transportation costs of coal, as computed by people on the staff of the port authority.

In there we use an example, I would like to read the text, however, of the statement, which is very brief.

Toledo has been a major coal shipping port for more than 50 years. During the period of 1963 through 1973, Toledo, each year, shipped more coal than any other U.S. port, reaching a peak of 34,825,000 short tons, in 1965.

This year, 1980, the Toledo coal docks will load about 1,500 lake vessels, with over 12 million tons of metallurgical and steam coal, destined for Canadian and American ports on the Great Lakes.

Presque Isle, as the coal facility is known, is operated by the Chessie system, and is utilized by Conrail, the B. & O. and the C. & O. railroads. The facility provides for the transfer of coal directly from hopper cars to vessels.

Presque Isle consists of four slips, each served by a coal loader. No. 4 east is 1,760 feet long, with a rotary, two-car dumper. It delivers coal through a conveyor belt system to a traveling loader, fitted with a telescopic chute. The loading rate on that machine is 4,500 tons an hour.

The other three slips each have a single car dumper, and load at the rate of 2,000 tons per hour.

The Port of Toledo receives coal mined in the States of Ohio, Kentucky, Tennessee, West Virginia, Virginia, and Pennsylvania. During 1979, West Virginia coal totaled 8.2 million tons, or 56.7 percent of our shipments.

Kentucky was second, with 5 million tons, or 28.7 percent.

And, Mr. Brown, this is the bad news part of this little message here.

Unfortunately, Ohio coal shipments were only about 600,000 tons, or 4 percent of Toledo's total. In fact, Ohio coal shipments through all Ohio ports, on Lake Erie, have declined from 4.5 million tons in 1971, to only—less than 600,000 tons through October of this year.

We at the Port of Toledo, recognize, of course, that the economy of Ohio directly affects our activities, and I hope that greater utilization of Ohio coal will be possible at some time in the future.

Now, coal orders, small and large can be moved over Toledo. Seaway class bulk ocean vessels can be loaded for direct shipment overseas, or lakers, self-unloading vessels can be—can move the coal through Canadian deepwater ports for transshipment into ocean vessels of up to 100,000 deadweight tons.

The seaway maximum vessel dimensions are 730 feet length, 76 feet breadth, and loaded draft of 26 feet.

Now, any vessel that is capable of transiting the seaway can enter the Port of Toledo. Coal sales are usually made on a contract that covers an annual coal requirement of the purchaser. Key factors in these transactions are the ability of the mining company to produce the coal, and the effective economical transportation of it to destination.

For the large tonnage contracts, transshipment over Toledo is very attractive, affording cost savings over congested east coast ports.

We have prepared a cost comparison, which is exhibit A, which I alluded to a while ago, of an annual movement of 660,000 tons of coal to Antwerp, Belgium, moving over Toledo for transshipment at Quebec, versus moving the same tonnage through Hampton Roads in a 63,200 deadweight-ton ocean bulker, assigned to a long-term charter.

Because of the excessive laytime at Hampton Roads, we have calculated that the vessel could only make six round trips in a 12-month period, and carry only 360,000 tons.

The same vessel could make 11 round trips from Quebec, carrying the full 660,000 tons. Movement from Hampton Roads, therefore, requires a second vessel, in a sense, and resulted in an increase of 83 percent in transportation charges, or $14.82 more per ton via Hampton Roads, than via Toledo-Quebec in this particular shipment.

The portion of the move by water from Toledo to Quebec was also studied. Exhibit B illustrates the capability of a single, self-unloading vessel, dedicated to the carriage of coal.

Moving that coal from producing mines to Toledo loading docks, is regulated by the Ore and Coal Exchange, located in Cleveland, Ohio. Their performance in coordinating the arrival of the coal in vessels at Toledo, makes possible the huge tonnage movement. A fuller explanation of their activities will be found in my exhibit C.

The significance of the capability of Toledo to load export coal lies in the fact that capacity is in place now, ready to receive coal tonnage, as opposed to additional coastal facilities, barely under construction or still in planning stages.

Also included in this statement, is what we are calling exhibit D, and there is a photo of a coal-loading facility at Toledo, and exhibit E, which is a mileage chart illustrating the proximity of Quebec and Toledo, vis-a-vis, coastal ports through selected North European Mediterranean destinations.

Thank you.

[Testimony resumes on p. 121.]

[Attachments to Mr. Fox's prepared statement follow:]

EXHIBIT A - 1

WATER TRANSPORTATION COST COMPARISON
TOLEDO TO QUEBEC vs. HAMPTON ROADS

Description Of Contract

1.	Destination:	Antwerp, Belgium
2.	Tonnage Contract:	660,000 Short Tons
3.	Term of Contract:	One Year
4.	Vessel Assigned:	Cathay Seatrade 63,200 D.W.T. 16 Knots on 65 Tons Fuel Oil
5.	Cargo Per Loaded Trip	60,000 Short Tons

Time Factors		Quebec	Hampton Roads
6.	Days Waiting To Load	2	30
7.	Days Loading	4	4
8.	Days Sailing	9	11
9.	Days Presentation To Arrival	15	45
10.	Days Wait and Discharge	10	10
11.	Days Return Ballast	9	11
12.	Days Total Round Voyage	34	66
13.	Round Trips One Year	11	6
14.	Short Tons Carried One Year (5 x 13)	660,000	360,000

(Revised) A-2

	COSTS	Quebec	Hampton Roads
15.	Vessel Hire @ $15,000 x (12)	$510,000	$ 990,000
16.	Fuel Oil @ $170 x 65 x (8 + 11)	198,900	243,100
17.	Total Per Round Voyage	$708,000	$1,233,100

Cost Comparison Based on Full 11 Trips and Varying Lay Days at Hampton Roads:

Toledo/Quebec

34 days x 11 trips = 374 days @ $15,000		$ 5,610,000
Fuel - 11 trips x $198,900 per trip		2,187,900
Rail Toledo to onboard Quebec - 660,000 x $11.73		7,741,800
Total 660,000 tons Tol/Que/Antwerp		$15,539,700
	Per Ton: $23.54	

Hampton Roads - 30 Lay Days

66 days x 11 trips = 726 days @ $15,000		$10,890,000
Fuel - 11 trips x $243,100 per trip		2,674,100
Loading 660,000 tons @ 75¢		495,000
Total 660,000 tons Hampton Roads/Antwerp		$14,059,100
	Per Ton: $21.30	
	- $ 2.24	

Hampton Roads - 40 Lay Days

76 days x 11 trips = 836 days @ $15,000		$12,540,000
Fuel - 11 trips x $243,100 per trip		2,674,100
Loading 660,000 tons @ 75¢		495,000
Total 660,000 tons Hampton Roads/Antwerp		$15,709,100
	Per Ton: $23.80	
	+ $ .26	

Hampton Roads - 50 Lay Days

86 days x 11 trips = 946 days @ $15,000		$14,190,000
Fuel - 11 trips x $198,100 per trip		2,674,000
Loading 660,000 tons @ 75¢		495,000
Total 660,000 tons Hampton Roads/Antwerp		$17,359,000
	Per Ton: $26.30	
	+ $ 2.76	

Hampton Roads - 60 Lay Days

96 days x 11 trips = 1,056 days @ $15,000		$15,840,000
Fuel - 11 trips x $198,100 per trip		2,674,000
Loading 660,000 tons @ 75¢		495,000
Total 660,000 tons Hampton Roads/Antwerp		$19,009,000
	Per Ton: $28.80	
	+ $ 5.26	

EXHIBIT B

Example of Cargo Movement Transit Time
Toledo Coal Dock to Quebec
33,000 Tons Lake Self-unloader Vessels

Wait and Load Time Toledo	20	Hours
Sailing Time Toledo - Quebec	80	"
Unload Time Quebec - Upon Arrival	12	"
Ballast Return Toledo	80	"
Round Trip Time	192	" (8 days)

Seaway Season - April 1 - December 15 (255 days)
Trips Each Vessel 32
For Safety Factor Use 30 Trips Each Vessel
Tonnage Each Trip, 33,000 Tons
Assigned Vessel - Full Season 990,000 Tons

Robert Charman - Asst. Vice President, Canada Steamship Lines suggested the above schedule, utilizing their McGriffin Class vessels in assigned service. Phone 514/288-0231

Other Canadian Lake Operators
With Large Self-unloader Vessels:

Upper Lakes Shipping Ltd. - Toronto - 416/920-7610
J.D. Leitch, President; L.A. Kaake, Exec. Vice President

Algoma Central - Marine Division - Sault Ste. Marie, Ontario
Phone: 705/949-2113, P.R. Cresswell, Mgr. Marine Divison

Halco Inc. - Westmount, Quebec
Phone: 514/932-2147, T. Norman Hall, President
Not many self-unloaders in the Hall fleet

Misener Transportation Ltd. - St. Catharines, Ontario
Phone: 416/688-3500, Graham Mitchell, Vice President

American owned Self-unloader fleets:

American Steamship Co. - Buffalo, New York
Phone: 716/854-7644, Thomas W. Burke, President

Bethlehem Steel Corporation
Great Lakes Steamship Division - Cleveland, Ohio
R.F. Dobson, Manager

Pickands Mather & Company - Cleveland, Ohio
John O. Greenwood, Asst. to President
Phone: 216/694-5700

U.S. Steel Corp. - Pittsburgh, Pa.
R.D. Goldbach, Vice President, Shipping
Phone: 412/433-2751

EXHIBIT C

PARAGRAPHS TAKEN FROM THE LAKE COAL I.C.C.
DOCKET NO. 27266, VOL. 232, PAGE 735

To effectively regulate and facilitate the movement of this enormous tonnage some central agency became imperative. After the entry of the United States into the World War in 1917 the Council of National Defense pooled all lake coal under the supervision of the Lake Erie Bituminous Coal Association, which was maintained by and at the expense of the railroads. On March 1, 1918, the railroads, lake-coal shippers and receivers, ore shippers, and vessel interests established the Ore and Coal Exchange, hereinafter sometimes called the Exchange, as an aid to the handling of their lake business. After the close of the 1918 season the pooling of lake coal was discontinued, but the operation of the Exchange was continued by the United States Railroad Administration and the entire costs thereof were paid by the latter until March 1, 1920, when the railroads were returned to their owners.

On March 25, 1920, the Exchange was reorganized by the railroads for the purpose of providing the best possible services to lake shippers; to furnish information as to coal at the ports and in transit and as to the operation of coal machines at the docks; to supervise and supply, movement, routing, and delivery of ore to furnaces; to establish contacts between railroads, coal shippers, and lake-vessel owners; and to furnish such other services as would facilitate the movement of coal and ore; thereby reducing the detention of cars, increasing the car supply, and adding to the facilities of the lake traffic. Under the reorganization it was changed from a centralized authority over the railroads, coal shippers, vessel owners, and the distribution of coal and ore, to a central agency established and maintained by the railroads. The Exchange acts as agent for the railroads. Its jurisdiction with respect to shipments of lake coal extends to all the Lake Erie ports, except Buffalo. Some of its more important functions are the issuance of permits regulating the movement of lake coal to the ports; receiving reports from all docks west of Buffalo of coal at the ports and the number of cars of coal in transit and due at the ports in the following 12, 24, 36, and 48 hour periods for each dock and transshipper or consignee with the number of cars in each consignment; issuance of daily reports showing the amount of coal at each dock and in transit, previous day's dumping, and estimated dumping for the current day; keeping track of the various vessels unloading at the Lake Erie ports which are named for coal loading, and of the time the boats will be unloaded and ready to sail, so that the dock at which each vessel will receive its cargo will be advised of the time of the vessel's probable arrival in order to get the coal to the docks and not delay the loading of the vessel; and receiving orders from transshippers for loading coal into vessels and transmitting such information to the docks. It issues reports of the coal dumped at all lake docks, the lake coal by origin districts shipped to each port, the average loading of bituminous and anthracite coal per car by all port roads, and the average detention to all cars loaded with lake coal.

The lake ports are not public markets or depots to which lake coal may be shipped for speculative purposes. A shipment of lake coal contemplates a through movement by rail and water, and the Exchange is the medium by which the flow of the coal to the ports and the transshipment by vessel are regulated. The Exchange keeps all interested lake-coal shippers, transshippers, or consignees, and carriers informed daily as to the situation at the ports, with the object of coordinating all of the lake activities and thus promoting the prompt unloading of cars and the dispatch of vessels. The expenses of the Exchange are borne by the railroads handling lake-cargo coal on the basis of the revenue to each road from the lake bituminous coal transported.

The consignee of lake coal at the port is known as a transshipper. Frequently the transshipper is also the mine operator and shipper. Shippers or transshippers before engaging in the shipping of lake coal are required to obtain a permit or permits from the Exchange. They must also designate to the Exchange the grades of lake coal which they desire to ship. Grades denominated by name, size, number, or quality permit a ready classification or grouping of cars by the carriers. The same designation may apply to coal from different mines or a different grade may apply for the same type of coal from the same mine or from different mines. It is not, however, the practice of any two transshippers to use the same grade designation for coal arriving at a port over the same railroad.

Upon arrival of cars of lake coal at the ports a card showing the date of arrival, the name of the transshipper, and the grade of coal is attached to each car. The cars are then switched and grouped as to different grades for the same transshipper. The number of different grades used by a transshipper varies. The extent of this variation is indicated by the experience of the Chesapeake & Ohio at Toledo for the season of 1935, when that road had 55 transshippers with an average of 160 grade names per day, some transshippers having 20 active grades. Classification of cars by grades rather than by car numbers results in the expeditious handling of cars for delivery to the dumping machine. While it entails a vast amount of initial switching, it saves a like amount or more of switching at the time of delivery to the vessel which would be necessary if the cars were placed in the order of their arrival and without regard to grades and consignees.

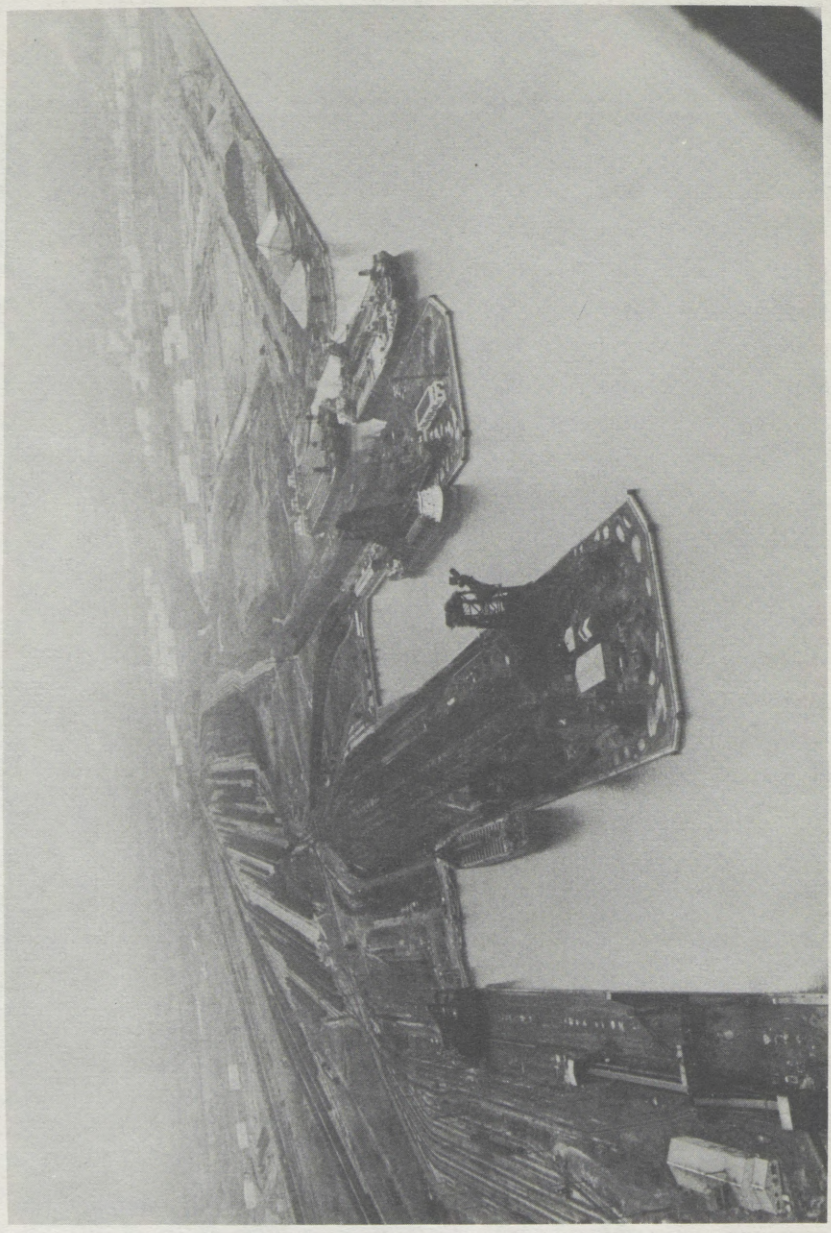
Preseason rule:--Under the preseason rule transshippers are permitted to accumulate at the ports large numbers of loaded cars of lake coal prior to the opening of the lake season without being charged with any debits for cars so held.

Lake Coal shipped from the mines prior to the opening of the lake shipping season is designated as preseason coal and all other lake coal as season coal. Since the lake front is not regarded as a public market for coal to be disposed of after it is shipped to and received at the ports, a regulation of the Exchange provides that a shipper or a transshipper of lake coal must apply for and receive a permit to ship such coal to the ports. A permit to ship preseason coal is limited to a specific cargo. A permit to ship season coal generally authorizes the shipment by a shipper or transshipper to his various consignments on the same or different railroads during the season.

All vessels named in the permits issued by the Exchange apparently had to be sanctioned by the interested port respondents, for when a vessel was named the Exchange endeavored to confirm the arrangement by contact with the vessel owner. Nevertheless, the provision requiring the naming of the vessel in the first instance and permitting the substitution of another vessel became the object of some abuse. The record indicates that in some instances prior to 1936 the vessel was named by the transshipper, either in the first or second instance, solely for the purpose of complying with the letter of the rule and obtaining the exemption of demurrage. Three illustrations will suffice.

Respondents justify the preseason rule by pointing out that generally at the opening of navigation the supply of lake coal at destination is about exhausted and the demand therefore is so imperative that great quantities must be at the ports ready to move immediately upon the opening of navigation. The free period permits a steady flow of cars to the ports over a period of about six weeks prior to the opening of navigation. If demurrage were to accrue on these cars at the ports the transshippers would largely withhold the shipment of coal to the ports until navigation opened and the coal could be promptly dumped from cars into vessels. In such circumstances large quantities of this coal would be tendered respondents at about the same time, with the result that their operation would be much more expensive and less efficient than it is now. To avoid this additional expense and to permit efficient operation is the primary purpose of the preseason rule. In addition, a steady flow of this coal to the lakes during the free period is desirable because during that time the volume of the movement of track-delivery coal gradually diminishes and in order to stabilize their production and the work of their employees mine operators must seek the lake market as an outlet for their coal.

Respondents call attention to the fact that they have complete control over the preseason shipment of coal, in that such shipment may be made only under permits from the Exchange, and that permits will not be issued unless sufficient cars are available. This control was exercised early in 1937 when, because of a threatened car shortage, shipments of preseason coal were restricted until the threat of shortage had passed. The period of shipment of preseason coal coincides with the late winter and early spring period when the demand for domestic coal and for cars usually declines. Preseason coal thus moves generally in railroad equipment which is not needed at the time for other loading and which would otherwise be idle. This enables respondents to make material savings in transportation expense, both road and yard. The record shows that the great bulk of the preseason coal is moved to the lakes without any additional train-miles or the use of any additional yard engines which are necessary upon the opening of the lake season in order to handle a volume of traffic which, although diminished by the preseason movement, is still exceedingly heavy. Moreover, the availability of preseason coal traffic northbound at the same time that iron ore stored at certain of the lake docks is normally moving southbound reduces greatly the mileage of empty cars and promotes operating efficiency.



MILEAGE CHART

(in Nautical Miles)

	Toledo	Quebec	Baltimore	Norfolk	New Orleans
Amsterdam	3684	3017	3689	3566	4847
Antwerp	3652	2985	3657	3534	4815
Belfast	3164	2497	3287	3166	4446
Bergen	3459	2792	3661	3540	4832
Bordeaux	3567	2900	3529	3407	4689
Bremen	3704	3037	3899	3776	5077
Cadiz	3651	2984	3434	3302	4502
Cherbourg	3400	2733	3405	3282	4563
Gdynia	4141	3474	4343	4222	5514
Genoa	4551	3884	4326	4203	5401
Hamburg	3718	3051	3920	3799	5091
Istanbul	5504	4837	5262	5139	6317
Leghorn	3466	2799	3471	3348	4629
Lisbon	3462	2795	3258	3128	4347
Liverpool	3277	2610	3400	3279	4559
London	3616	2949	3621	3498	4779
Marseilles	4394	3727	4169	4046	5244

Mr. FLORIO. Thank you very much.
Sir?

STATEMENT OF JEAN LOUIS LACHANCE

Mr. LACHANCE. Thank you. Mr. Chairman, mine is the proverbial, a picture is worth a thousand words. So I will give you a picture, and I won't talk.

The documents that I have just remitted, one is a little story that tells about 50 feet of water at low tide, and this is Quebec City, and it tells the story of a St. Lawrence stevedore, and not yet to represent the Port Authority of Quebec.

This article was written prior to the takeover, of our company by the Cast group, and consequently I have had a copy of the press release announcing the takeover of St. Lawrence Stevedoring by Cast.

I can only say that the—in the course of the last year there hass been a tremendous amount of inquiry, and as Norman Fox just pointed out, we found out too, that certain things, which were confirmed by Conrail this morning, whereas you have an average cost of $14 to the eastern seaboard on an average of $19 or $20 to the gulf, and he indicated by $21, why Quebec could be anywhere between $18 and $21, depending on the height and the cost of the barge.

If you add the water transportation to that, the east coast seems to be way ahead of everybody, in terms of total cost being possibly something like $24, as opposed to $28 or $29 at the Quebec terminal, $32 for the New Orleans.

The interest created, with regard to our terminal, was that the detention, on the east coast, was so bad, that the cost was no longer $24 on the east coast, it had become more like $32 or $33, and that, as Mr. Fox just pointed out, a differential of $14, would make it even worse.

So there has been interest, but the interest has been from people with spot sales, and can you handle my little 100,000 or 200,000 tons, and the variety of grades, and we have presently limited storage facilities, but if we are to end all these little parcels, there is no way that we cannot have very much.

But as the picture comes, we have a tremendous potential for expansion, and with having been taken over by Cast, and their willingness to spend the dollars to increase our capacity, we are hopeful that the—in 1981, we can, without too much ado, maximize what we already are in the way of a company.

Possibly, to add 3 million tons, as opposed to 400,000 tons this year of coal, coal hauling.

It could be that we might try, with the direct transshipment of self-unloading barges into oceangoing vessels, in order to increase our throughput capacity, whether this will succeed, this will see, but we will certainly experiment with that.

So in essence, we are the only link in several chains out of the east coast, the gulf or the Great Lakes, or the St.Lawrence Seaway, and we are hopeful to be able to serve the U.S. commerce in the sense of coal exports to European countries.

Thank you.

Mr. FLORIO. Gentlemen, thank you very much.

In light of the time restraints and the scheduling problems, I would like to just ask three questions, and then reserve the right to submit some other questions to you in writing.

Mr. Fjord, the anticipated increase out of New Orleans that you made reference to, is any of that attributable to further development to the Powder River Basin, and connections to——

Mr. FJORD. Yes, yes; it does anticipate——

Mr. FLORIO. Do you have any rough ideas as to what magnitude?

Mr. FJORD. Probably about 25 percent of the increase would be coming down through from western coal.

Mr. FLORIO. And is that contemplating that the Burlington Northern Railroad, would be the major source of that, or are you anticipating other railroads having access into the Powder River Basin?

Mr. FJORD. A great deal of it would come by rail, but part of it would also be coming by barge. Transshipment into the Arkansas vertebrae.

Mr. FLORIO. And with regard to bargelines and you talked about the-maintenance of some of the locks, the Congress recently has demonstrated an inclination to start user fees. I suspect in the next Congress, if there are proposals to increase maintenance on locks, it will be a large or great amount of feeling that the user fees should, in a sense, pay for the entire cost of maintenance or construction. How will the adoption of that philosophy by the Congress change the attractiveness of utilizing the barge lines?

Mr. FJORD. We feel that user charges will undoubtedly make barge-line traffic somewhat less competitive with the other modes of transportation, but as we have noticed in the adoption of the user charge that is in effect now, the rail rates have increased proportionately greater, than the bargeline rates, even after the adoption of the user charge.

It will cost more, of course, for the bargelines to operate within the the river systems, but we still are maintaining that competitive advantage by reason of the fact that the rails chose to adopt higher rates, as soon as our user charges went into effect.

Mr. FLORIO. Mr. Lachance, I thought I heard you say that a country such as South Africa and Australia will take a number of years, I think you said 5 years or so, to resolve their internal interstructure problems, but at that point, they would be in a position to double their capacity. Then I thought you also said that the United States, particularly the port problems, would take about 2 or 3 years to be resolved. If I understood what you said, what is the incentive for anyone to sign a long term contract with a producer in the United States, having all of those things just hanging out there, not knowing what the impact, I assume the impact of doubling capacity in a place like Australia, is going to change their picture, so as to make it more attractive?

Mr. LACHANCE. I am—bear in mind that I am more of a shipping expert than a coal expert, but—the doubling of capacity, and I—my figures are probably only approximate, rather than exact, but I think you are talking of something like the 10 to 15 million tons presently being exported from South Africa, double that capacity.

Somewhere in the 50 or 60 million tons in Australia, doubling that capacity. I don't think it is really as much as that in Australia, but it is

quite small, in comparison with these enormous figures that we see for the demand for coal in the future.

My comments about the increasing the capacity of the American ports, were merely there aren't numerous plans that have been announced, and particularly this year, most of them have been suggested to be somewhere around 2 or 3 or 4 years away, and I think we have all recognized that not only in the States, but in a lot of other parts of the world, we need, where schemes aren't announced, usually the time between announcement and completion is considerably longer for the reasons that I have quoted on the environmental problems and so on and so forth.

So the—it does appear that a lot of these new port facilities will be a little bit further down the road than have been announced, and by the time that they come in, they will be only alleviating the present congestion problems that there are, and very obviously the major source of world coals supplies is the United States, and the major exports are going to be from the United States, so we believe that there is a continuing problem in the foreseeable future, because we—the completion of new facilities is barely going to keep up with the demand for American coal from the rest of the world.

Mr. FLORIO. Let me just conclude by saying I have a pessimistic feeling that some of the individuals here today are saying that unless these actions are taken, we're not sure that we are going to get those long-term commitments that enabled us to go forward in the short term with the improvements that are necessary. Some of the other people, including yourself, just said that the demand is there, it is going to be there, we are the volume suppliers, so it almost seems, to any degree, anything is inevitable, there has to be these types of commitments, and that the United States will be the beneficiary of those inevitable demands.

Is that a fair assessment?

Mr. LACHANCE. I think so. A number of our executives have been discussing coal with very large groups in the United Kingdom, and in Europe, and the evidence that we have from them is that they are after or in the process of about to sign very, or endeavor to sign, very large, long-term contracts.

The securities and supply is very important. This is one of the problems which Australia has had, and will have to live with in the immediate future, that their labor unrest there, both in the mines and in the courts, has been a very severe problem, that is one of the reasons that the Japanese are trying to apportion out their sources of supply.

They got caught very poorly this year by not having adequate stockpiles when the Australians went on strike, the strike lasted a long time, and they have been dashing to Hampton Roads and trying to pick up any coal that they could, and it has really made a mess of what was already a bad situation.

The Japanese are going to buy as much from alternative sources as they can, although to them I believe that Australian is the most economical in terms of actual cost in purchasing and transportation.

Mr. BROWN. I have just a couple of questions. We do have a time-frame because the chairman and members of the staff have to catch a plane back to Washington. So I would like you to submit, if you

would, for the record, some estimate of shipping costs from the coalfields in Ohio, by way of the Great Lakes, by way of the river system, through New Orleans, to various ports of demand, various places of demand in Europe, that is the northern European ports, the southern European ports, and Far Eastern ports, Tokyo, Japan, wherever.

The other thing that I am curious about is the limitations on the St. Lawrence Seaway, whether those are irresolvable problems for Lake Erie ports. I guess the Welland Canal is not under any kind of consideration for modernization.

Mr. LACHANCE. It is, but that is a few years away.

Mr. BROWN. Well, I wonder if you could give us some information on that particular circumstance in the upper St. Lawrence system.

I think I have heard a suggestion that we could mix Western coal with Appalachian coal in a Great Lakes shipping process. I am curious to know what is envisioned there. Whether the railroads really run that way and you could get Western coal out of any of the western Great Lakes ports. And then finally, to make one observation about the St. Lawrence Seaway, it seems to me that that is where that great American innocent, Abbie Hoffman, was doing some environmental work to keep the St. Lawrence from being further developed. Didn't he take refuge on an island up there someplace and suggest that we shouldn't do anything about changing the St. Lawrence River?

Mr. MACFARLANE. Sure, he got lost in the Thousand Islands area, between Ontario and New York, which is one of the world's great paradises.

And one little point,—I had hoped, I should have made to you, if I could be just brief about this—is, as an example, there was a little talk about blending by the coal people and the miners this morning, one of the companies that we talked to in Europe was a very large Belgian steel concern, and their thoughts were that they could well live with the higher sulfur content of Ohio-type coal, coming out through possibly the lake area, Quebec, and the lower sulfur coming out possibly from the New Orleans route, or through Hampton Roads, and there effectively, doing the blending over there, rather than trying to cope with this problem in some way over here.

It didn't seem to be of that much concern about the high sulfur content of this coal in this area in a number of discussions that our people had with them over there.

I should make one more point, this just struck me this morning, that in fact, the seaway toll system rather discriminates against the carriage of coal, because the rate through the seaway system for grain is now 72 cents a metric ton, as against other bulk cargoes, which include coal, which is presently 99 cents a metric ton—incidentally, I think that 70-odd percent of that is paid in Canadian funds, and 29 percent in American funds, so it gives some advantage over the cheaper Canadian dollar.

That is quite a substantial difference.

Mr. BROWN. And that determination is made by the what?

Mr. FOX. By agreement between the two seaway entities, the St. Lawrence Seaway Development Corporation, and the St. Lawrence Seaway Authority of Canada.

Mr. MACFARLANE. As a Canadian, I cannot claim fault with our cousins south of the border on the problem that we have in the seaway, they are more related to our own Federal Government.

Mr. BROWN. I wish you, if you have some written material or historic material or any article that would be helpful to us in looking at the St. Lawrence Seaway problems, to generally provide that to us.

Mr. Chairman, I want to express again the appreciation that I have for your holding this hearing. I am sorry that our time frame is constrained as it is, but if it wasn't we'd go on until the next plane would leave, and we would probably never complete either. But it has been, I think, illuminating not only from the standpoint of your subcommittee, and my concern about the energy problem through my Energy Subcommittee in the Committee on Commerce, but I think it will also be material that will be helpful to groups like the Public Works Committee of the House, and the various related Senate committees. Today's hearing has clearly brought together a lot of ideas that might even break down some of the barriers between the various methods of shipment, so that we can get an American, maybe I should say, an American-Canadian answer to the problems of getting coal through these channels.

Mr. FLORIO. I would just echo the gentleman's comments that this has been a very valuable session, and that I am sure that the committee and a number of committees will gain a great amount of information in the framing of policies as we go forward in this area, and I would express my appreciation to this panel, and thank you,

The committee is adjourned.

[Whereupon, at 3:30 p.m., the hearing was adjourned.]

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