# Classroom Activity Lignite Economics: Jobs, Business Volume, Tax Revenue

#### Lesson 1 -- Illustrate how each direct employee results in an additional 3 indirect employees

MN-DAK Mining Company ------ Sells six tons of coal at \$11/ton = \$66.00 Give President \$66 for coal purchase

President pays Tax Commissioner for Severance and Conversion Taxes (\$1/ton) = \$6.00

President hires Self & two employees  $(3 \times \$5) = \$15.00$ 

Hires 3 Businesses to provide goods & services - gives them each \$15 (\$45 total)

Each business has a total of 3 employees (Owner + 2) (Each employee receives \$5)

\*3 Mining Company Employers = 9 Indirect Employees

#### Lesson 2 -- Illustrate how dollar circulates in economy (\$1 = \$3)

Each employee (12) names personal goods or services needed -- pays businesses \$1 earned for desired goods and services

36 people plus Tax Commissioner now involved

## Lesson 3 -- Illustrate how expenditures, salaries result in tax revenue and how tax revenue is used for services

12 employees -- pay \$1 to Tax Commissioner (20% tax bracket)

Tax Commissioner (\$18) identifies various service and pays each service \$1

#### **Summary of \$66**

- \$12 -- keep for savings (Original 3 miners)
- \$36 keep for savings (Identified 9 contractor/suppliers for goods and services)
- \$12 -- Tax Commissioner (Personal and income tax)
- \$ 6 -- Severance and Conversion Tax

\$66 -- Total

# Classroom Activity: Lignite Economics

# **JOBS**











**Direct Job** 

**Indirect Jobs** 

## **BUSINESS ACTIVITY**



### TAX REVENUE

Tax \$ = Services

### **Lignite Industry Contractors and Suppliers**

Heavy equipment supplier

**Coal testing lab** 

**Fuel supplier** 

**Engineering services** 

Earthwork contractor

Legal services

**Machine shop services** 

**Maintenance services** 

**Utilities (electricity)** 

**Transportation services** 

**Parts supplier** 

**Explosives supplier** 

**Environmental consultant** 

Tire supplier

**Doctor** 

Rent

**Dentist** 

**Bank (car or house payment)** 

**Grocer (food)** 

**Credit card payment** 

**Telephone** 

**Insurance payment** 

Gas/electricity

**Home repairs/improvements** 

Water

**Vacations** 

Clothing

**Sporting events** 

Car repair/maintenance

Toys for children

Gasoline

New car or truck

**Movies** 

**Electronics (TV, stereo, home computer)** 

### **Life Before & After Electricity**

#### **Classroom Activity**

Assign each student in a grade school or high school class to write a paper on what life was like just before a customer received electricity, and on what life was like just after a customer first received electricity. Have each student contact a senior citizen that they know, whether it be one of their grandparents or a neighbor (an alternative would be to talk to someone who has knowledge of such an experience, for example, someone who works in the energy industry, or someone who has heard about this experience many times from their parents). Ask this person questions such as:

- What was life like before electricity? How did you wash clothes, prepare food, read at night, dry your hair, etc.? Also, how did you get your work done, whether it be at a business or farm?
- When did you first get electricity? What did you have to do in order to be able to use that electricity (wire home, outlets)? What fuel source provided that electricity (lignite, hydro, etc.)?
- What were your first uses of electricity at your home and business/farm?
- Did the public eagerly anticipate the use of electricity, or were some people skeptical of its use?
- Do you have any personal experiences of electricity generated from lignite, whether it be working in the industry, or living near where it is generated?

Have the students write a report based on the interview with a senior citizen. Reports should be longer for high school students. An additional activity may be to have the students give a short oral presentation to the class on what they learned.