ACTIVITIES OF THE CENTER FOR COAL TECHNOLOGY RESEARCH, CCTR, 2002 TO PRESENT

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(A) **July 2002:**
CCTR is established by S.B.29
Mission:-
• “Develop technologies that can use Indiana coal in an environmentally and economically sound manner”
• No funds appropriated for the Center at that time

(B) **July 2003:**
H.B.1166 creates CCTR Advisory Panel (AP)
• Start-up funding made available to CCTR by Indiana Department of Commerce
• Two studies commissioned with the funds:-
  (a) “Expanding The Utilization of Indiana’s Coals” - CCTR Staff
  (b) “Characterization of Indiana’s Coal Resource”- IGS Staff
June 2004: Advisory Panel Appointed
Members include 4 from utilities, 2 from coal producers, 2 from environmental interest groups, 1 each from coal transportation, unions, iron and steel companies, Indiana business interests, Southwest Indiana regional interests

August 2004: First Panel Meeting
- Attended by over 50 panelist and guests. Two studies distributed
- Purpose – Refine objectives of CCTR; Suggest strategies to achieve mission
- Concept approved to use funds for planning grants to define what research and development is needed
- 12 topics for the planning grants were proposed

October 2004: Second Panel Meeting
Selected 3 of 12 topics to fund now, others to be delayed until 2005
November 2004: RFP for Three Planning Grants Issued

Planning Grant #1: What are the advantages and disadvantages of using Indiana coals as fuels for the next generation of clean coal technologies (CCT)? Likely submitters: coal characterization experts with help from CCT experts

Planning Grant #2: What factors will affect the design and implementation of these technologies in Indiana? Likely submitters: CCT experts with help from coal characterization, utility, and regulatory experts

Planning Grant #3: What key factors encourage or inhibit the use of Indiana coals in existing facilities? Likely submitters: those familiar with existing uses of Indiana coals, knowledge of factors that govern fuel choice
Planning grant competition open to all: winners to be selected by the Advisory Panel in mid February; Reports due in November 2005

**Goals of These Planning Grants are to:-**

1. Identify and assess the relevant previous/ongoing studies in the topic area
2. Using this assessment as a starting point, identify technical, policy, and economic issues related to the area which impede the use of Indiana coals
3. Summarize the principal areas of expert agreement and disagreement regarding issues
4. For areas where agreement is found, suggest a public – private action plan for the State, with milestones, deliverables, estimates of resources needed, potential sources of matching funds
Goals of These Planning Grants (continued):
(5) For areas where not enough is known to proceed, suggest a research plan, with deliverables
(6) Build in-state research capability to carry out both plans

What About the Future?
(a) The CCTR is asking for legislation this session to provide continuing funding for the CCTR in order to implement the action and research plans developed by the planning grants
(b) CCTR suggestion is to raise the funding from a tax on coal consumption in our State
(c) A tax of 3 cents per short ton consumed will raise two million dollars per year, enough to initiate a viable research program (average cost per ton of coal in Indiana – utilities $24, industrial $38, coking $58)
About the Future (continued 1):

(d) Such a level of funding would bring us into line with surrounding states commitments to coal research:

- **Illinois** - $60 million support over past 20 years
- **Ohio** - $2 to $4 million per year
- **Kentucky** - Current governor’s budget provides $3 million for clean coal technology

(e) Would provide Indiana the opportunity to build on surrounding states past efforts through the formation of an Illinois Coal Basin Research Consortium
About the Future (continued 2):

(f) Would allow CCTR to provide the 50% match required for federal funding of coal research and give CCTR staff time/resources to help organize/promote additional demonstration projects in the Illinois Coal Basin such as FutureGen

(g) Plan would be to use 90% of the funds authorized for funding solicited and unsolicited proposals, the remainder for staff time
The CCTR Vision

- Develop a state needs focused and applied research and development program
- Projects would, from the start, involve potential users of the results of the projects
- CCTR direction would be responsive to changing needs of Indiana, as expressed by our Advisory Panel
- CCTR would put in place a project evaluation process, and keep the Advisory Panel informed of progress
- Evaluation criteria would be based on the project advancing the use of Indiana coals in an environmentally and economically sound manner
Who Would Pay the Tax?
Depends how much of the tax is passed forward to coal consumers, passed backward to coal producers
- If passed forward, 75% to utility customers, 25% to industrial customers
- If passed backward, 52% to out-of-state producers, 48% to in-state producers

In the short-run, tax incidence depends on the nature of coal contracts between coal producers and consumers.

In the long-run, economists conclude it would depend on the relative price elasticities of demand and supply of coal – the less responsive supply quantities are to price, the more producers will bear the tax burden: the same with demand response for consumers
So Why Support the Funding for the CCTR?

As the CCTR is successful in accomplishing its’ mission:

- **Indiana Economic Development**: Increasing Indiana coal use will revitalize a stagnant industry
- Gets Indiana involved in the CCT revolution being driven by high natural gas prices, tightening environmental legislation
- Increased awareness of the enormous size of Indiana’s coal reserves (more energy in the form of coal below Indiana than energy in the form of oil and gas in the entire U.S. !)
- Maximizing the use of Indiana coals which have several advantages when used with CCT, relative to other coals
- Will clearly allow Indiana to address environmental issues while minimizing impact on Indiana’s low electricity costs
Indiana’s Special Situation
(1) Our need for new base-load capacity **now**
(2) 94% of electrical energy generated in Indiana comes from coal
(3) Good reason to believe CCT is least cost choice over life of capacity versus CC, PC, given future environmental scenarios
(4) Bill Rosenberg’s point – Indiana is a perfect place to introduce CCT, since we are still regulated, and can reduce revenue uncertainty associated with CCT’s
(5) S.B. 29 – 3 percentage point adder to allowed rate of return for CCT

On the Risk Side
(1) Will the CCTR accomplish it’s mission?
(2) Will other special interests want to pile on the tax, ask for a portion of the revenues?
(3) Will the incoming administration support the request?