

QUIZ 11 VERSION B "Regulation of Electric Power"

INSTRUCTIONS: This exam is closed-book, closed-notes. Simple calculators are permitted, but graphing calculators or calculators with alphabetical keyboards are NOT permitted. Mobile phones or other wireless devices are NOT permitted.

Multiple choice: Circle the one best answer to each question. [10 pts each]

- (1) The *rate base* for a regulated public utility is
- the value of its plant and equipment.
 - the monthly service fee for its lowest-price customers.
 - the number of customers it serves.
 - the minimum usage price it may charge.

- (2) Regulatory lag _____ the utility's incentives to minimize cost.
- completely eliminates.
 - has no effect on.
 - decreases.
 - increases.

- (3) Under price-cap regulation, the utility's prices are set
- to match those of its competitors.
 - to increase with the rate of inflation, less adjustments for industry productivity growth.
 - to cover the utility's expenses plus an allowed rate of return on the rate base.
 - to match the price of hats.

- (4) According to Kahn's definition, the cost of an input that can be used to produce both of two outputs, where the amount needed of the input depends on the maximum of the two outputs, is called
- an average cost.
 - a fixed cost.
 - a common cost.
 - a joint cost.
 - a fully-distributed cost.

- (5) If a utility switches from uniform pricing to peak-load pricing, it will require
- less capacity.
 - the same capacity.
 - more capacity.
 - Cannot be determined from information given.

- (6) The most important barrier to peak-load pricing in electric power in practice is that
- sophisticated usage meters are not available.
 - demand for power fluctuates during the day and over the year.
 - the relevant economic theory is not yet developed.
 - not enough electric power is available.

(7) Wholesale markets for electricity are regulated by

- a. the Federal Energy Regulatory Commission.
- b. local governments.
- c. state utility commissions.
- d. the Federal Trade Commission.

(8) Assume that in some wholesale electricity market, all producers are paid the same equilibrium price, and that no firm has the ability to manipulate the final price.

Then each firm's optimal bid is

- a. equal to its true marginal cost.
- b. zero.
- c. greater than its true marginal cost.
- d. less than its true marginal cost.

(9) Even if a wholesale electricity market is functioning perfectly, the price of electricity may be higher in one location than others if

- a. that location has greater demand for electricity than others.
- b. transmission lines going into that location are at maximum safe capacity.
- c. that location does not use peak-load pricing for retail customers.
- d. that location has fewer generators than others.

(10) The short-run wholesale electricity supply curve looks like a

- a. tennis racket.
- b. hockey stick.
- c. hula-hoop.
- d. baseball bat.

[end of quiz]