

Exercise 6 (Individual, 12 Points Total)
DATE: Thursday, April 2, 5:30pm

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EE/Econ 458, Spring 2009

EXERCISE 6: Markets for Electrical Energy (K/S Chapter 3)

Basic References for Ex 6: EE/Econ 458 Syllabus Section IV.A

[1] ** L. Tesfatsion, *Lecture Notes on Kirschen/Strbac, Chapter 3*, ON-LINE

www.econ.iastate.edu/classes/econ458/tesfatsion/OrganizationOfMarkets.KSChapter3.pdf

[2] ** D. Kirschen and G. Strbac, *Power System Economics*, Required Textbook, Chapter 3

General Exercise Instructions:

- (a) This exercise consists of ONE QUESTION.
- (b) Be sure to show all your work so that partial credit can be given for answers even if some type of error occurs along the way.
- (c) Read the entire question carefully before you begin your answer.
- (d) Define terms and concepts clearly and carefully.
- (e) It is recommended that you make an extra copy of your answer for use in class discussion on the due date. Individuals will be called upon to report their findings.
- (f) **Recall that late assignments cannot be accepted – no exceptions! Make sure your exercise is turned in to the instructor or TA at the *beginning* of class on the due date before discussion of exercise answers commences. Do not send your exercise in via email or place it in a department mailbox as these sites might not be checked in time.**

QUESTION (12 Points)

Carry out Problem 3.3 on page 67 of Chapter 3 for the Kirschen/Strbac (K/S) textbook, as follows.

An **answer** for Problem 3.3 is provided in the K/S Appendix (p. 267). **Your** task is to carefully *derive* this answer to establish its correctness (or to carefully show why you believe a provided answer is not correct if that is what you conclude).