

1 **Q. Evidence of Ms. McShane, Fair ROE conceptual foundations, page 36-44: In the**  
2 **example on page 42 (lines 1056-1059) please confirm that if the investor wanted a**  
3 **return of 10% and the book and market value were both \$100, then if the investors**  
4 **required rate of return drops to 5% then the market value would increase to \$200 if**  
5 **we assume a perpetuity. If not please explain using the simple perpetuity model**  
6 **why this does not hold and why in the circumstances the regulator should not adjust**  
7 **the allowed ROE downward to remove the excess market value.**

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9 A. Theoretically, yes. The question appears to be premised on the assumption that the  
10 market to book ratio of a publicly traded utility should be 1.0. There are a number of  
11 factors which would cause market to book ratios to deviate from 1.0.

12  
13 Share prices reflect returns that investors expect to earn over the longer-term, not the  
14 returns that regulators have historically allowed. Expected returns may be materially  
15 higher than allowed returns due to factors such as the anticipation of achievement of  
16 synergies among existing operations, of higher returns achieved from non-regulated  
17 operations, through performance-based regulation and/or growth in the customer or asset  
18 base, the perceived ability to improve shareholder returns by leveraging assets, and the  
19 ability of the firms to take advantage of growth opportunities beyond the existing asset  
20 base.

21  
22 Further, book values are computed using generally accepted accounting principles. The  
23 book value of a utility's common equity is an accounting measure that reflects the  
24 historic impacts of various financial statement accounting conventions (and changes in  
25 those conventions over time) for recording such items as depreciation reserves, deferred  
26 taxes, pension assets and liabilities, etc. The sole impact of accounting conventions over  
27 time on the recorded amount of equity can cause the book value of equity to diverge  
28 significantly from the economic value, particularly in the presence of inflation, and as  
29 well as the going concern value of the corporation.

30  
31 Finally, the share prices of the publicly traded utility holding companies are likely to be  
32 priced on a relative basis to other equity securities rather than on an absolute basis  
33 (relative to their book value). The market to book ratios of the traded public utility  
34 holding companies have generally tracked the overall tenor or "mood" (and the market to  
35 book ratio) of the equity market composite over time.

36  
37 In addition, economic principles do not support the equality of market and book values.  
38 A basic economic principle establishes the expected relationship between market value  
39 and replacement cost which provides support for market prices in excess of original cost  
40 book value. That economic principle holds that, in the longer-run, in the aggregate for an  
41 industry, market value should equal replacement cost of the assets. The principle is based  
42 on the notion that, if the market value of firms exceeds the replacement cost of the  
43 productive capacity, there is an incentive to establish new firms. The existence of  
44 additional firms would lower prices of goods and services, lower profits and thus reduce  
45 market values of all the firms in the industry. In the opposite circumstance, there is an

1 incentive to disinvest, i.e., to not replace depreciated assets. The disappearance of firms  
2 would push up prices of goods and services; raise the profits of the remaining firms,  
3 thereby raising the market values of the remaining firms. In equilibrium, market value  
4 should equal replacement cost. In the presence of inflation, even at moderate levels,  
5 absent significant technological advances, replacement cost should exceed the original  
6 cost book value of assets. Consequently, from an economic principles basis, the market  
7 value of common equity should be expected to exceed its book value. Please see  
8 discussion at page 6 of Appendix F.  
9

10 For these reasons, there is no basis for the regulator to adjust the allowed ROE downward  
11 to remove so-called “excess market value”.