CLOSING SUBMISSIONS OF ERROL E. NILES
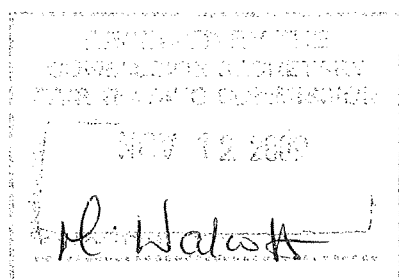## THE BARBADOS LIGHT & POWER COMPANY LIMITED
RATE REVIEW HEARING

LLOYD ERSKINE SANDIFORD CENTRE – OCTOBER 07 – 23, 2009

BARBADOS   **NO.02/09 BL&P-RADJ**

THE FAIR TRADING COMMISSION

IN THE MATTER of the Utilities Regulation Act, Cap 282 of the Laws of Barbados;

IN THE MATTER of the Utilities Regulation (Procedural) Rules, 2003;

IN THE MATTER of the Application by The Barbados Light & Power Company Limited for a Review of Electricity Rates pursuant to section 16 of the Utilities Regulation Act, Cap 282 of the Laws of Barbados.

THE BARBADOS LIGHT & POWER COMPANY LIMITED	**APPLICANT**
AND	
BARBADOS ASSOCIATION OF RETIRED PERSONS	**INTERVENOR**
BARBADOS SMALL BUSINESS ASSOCIATION	**INTERVENOR**
BARBADOS ASSOCIATION OF NON-GOVERNMENTAL ORGANISATION	**INTERVENOR**
BARBADOS CONSUMER RESEARCH ORGANISATION INC.	**INTERVENOR**
DR. ROLAND CLARKE	**INTERVENOR**
MR. ERROL NILES	**INTERVENOR**
MR DOUGLAS TROTMAN	**INTERVENOR**
CANBAR TECHNICAL SERVICES LTD.	**INTERVENOR**
SENTINEL GROUP CARIBBEAN INC.	**INTERVENOR**

MR CHAIRMAN, Commissioners

1. In my opening statement, I deliberately focussed on the issue of debt/equity as I recognised that this is at the heart of this hearing. It is this objective that is driving the need to earn greater revenue for the Applicant not that the Applicant is having difficulty servicing its debt or expenses.

2. The only way the Applicant can justify a rate increase is to try to convince the Tribunal that somehow this debt/equity ratio of 35/65 % is standard regulatory practice which is designed to give an aura of authenticity to the practice. Nothing is further from the truth as it is not standardised as the ratio varies across the board, even within the United States.

3. The other points I would like to stress at the outset is this. The Tribunal may recall that I suggested to Mr Camfield, an expert witness for the Applicant, that if two people were given the same parameters and information, they would come up with two different weighted average cost of capital (WACC). And Mr Camfield agreed with the suggestion. The WACC suggested by Mr Camfield is therefore subjective and depends entirely on his motivation. [See **The Weighted Average Cost of Capital (WACC) for Firm Valuation Calculations – International Research Journal of Finance and Economics – TAB #1**]

4. It seems that the present debt/equity ratio of about 22/78% must yield a lower a lower WACC than the 35/65% suggested by Mr Camfield which may never be achieved in the short-term. [See **Decision Before The Public Utilities Commission of the State of Colorado – TAB#2**]

5. The Tribunal may also recall that Mr Camfield agreed with my suggestion that his study was known in economic jargon as a null hypothesis. His affidavit is merely opinion evidence and I suggest that the Tribunal takes it with a pinch of salt as the United States conditions should not be imported to Barbados "lock, stock and barrel".

6. The Tribunal may also recall that Mr Worme, during my cross-examination, admitted that his Rate Design, based on the Cost of

Service Study by Mr O'Sheasy and the WACC done by Mr Camfield was not subject to and any audit or testing. When I asked Mr Worme why the need for a new rate Design (as opposed to 1983), his answer was to get a better revenue requirement.

7. The applicant made a profit of over $22 million in 2008 on a sub-optimal debt/equity ratio of 22/78% and a rate of return of 6.07 %. I submit that this performance should be used as a model for other utilities as the applicant is doing much better than other utilities in the region with higher debt/equity ratios. The question therefore is: why change? The only answer is that it is standard regulatory practice. I urge the Tribunal to reject such spurious argument.

8. Mr Best, on the other, was convinced that that there was no way the company could reduce its cost and Mr King seemed to suggest that the company has achieved its optimum level of efficiency. I would like to remind him that every time he says that, he should remember the **Peter Principle**.

9. Commissioners, my null HYPOTHESIS is this: That there are at least 3 different ways to calculate the WACC, it is complicated and different results are obtained depending on which formula is used.

10. The capital funding of a company is made up of 2 components: debt and equity (in the classic and traditional sense). Lenders and equity holders each expect a certain rate of return on the funds or capital they have provided.

11. The cost of that capital is the expected return to equity holders and to debt holders, so WACC tells us the return both stakeholders can expect. For example, Mr Chairman, if debt holder requires a 10% return on their investment and the shareholder 20%, on average you will need 15% return to satisfy both holders. In simple language, 15% would be the WACC.

12. **The peculiar feature of this Rate Hearing is that no evidence was led to say what rate of return the one shareholder of the Applicant was requesting. If that shareholder has already invested its money and if it is not satisfied with its return, there would have dumped their shares on the market.**

13. **It should be noted that there is no evidence that there was a rush to sell shares in the holding company as one would expect**

if the equity shareholders were not getting the rate of return they thought was adequate for the risk they were taking.

14. You may recall that I cross-examined Mr Williams about who was driving this new debt/equity ratio of 35/65. His answer was that the Applicant needed to raise revenue to attract lenders. So far as I recall, he did not say lenders were demanding or hinting that that revenue was inadequate. I suppose that was left for inference.

15. It is not politically correct to appear to be raising rates at any time, particularly now. So I submit, the Applicant is using the need for increased rate of return by increasing the WACC by about 70% from 6.7 % to 10.48% as cover. It is also noteworthy that neither the Applicant nor its expert Mr Camfield provided any case law to support their contention, except to say that it was standard regulatory practice.

16. **Part of the calculation of WACC is the notion of risk.** I have already indicated that there is little risk to the debt holders by virtue of the Government guarantee for the foreign component of loans borrowed by the Applicant, which is a contingent liability of all taxpayers, including its customers. **Barbados observes the rule of law, it has an independent judiciary, property rights are guaranteed under the Constitution and it has a stable political climate.** So far Barbados has not defaulted on any of its international financial obligations, despite recent downgrade in its Standards & Poors' rating.

17. Under international law, these are well recognised principles against which political risks are measured. It is true that economic risks in the present climate have declined marginally, but overall risk as I understand it should not be a significant factor in the WACC.

18. Mr Chairman, you may also note that the foreign component of the company's loans are guaranteed by Government and therefore remain an ultimate contingent liability to the company's customers for many years. So the risk to lenders is minimal.

19. **It should also be noted that at present the fuel charge component is almost fully absorbed by the customers. If the fixed charge is substituted by the customer charge as proposed,**

the customers will be bearing a substantial portion of the primary costs of the company.

20. Most theorists agree that the primary objective of regulation was, and still is, to produce results in the utility sectors of the economy which parallel those that would be obtained under conditions of competition. This is not the case in Barbados unlike the United States and Canada where there is greater competition. It should be borne in mind that United States courts decisions are not binding in Barbados and are only of persuasive authority and reflect a more competitive environment, quite unlike the situation the Applicant faces.

21. The results of maximum efficiency and equity, existent under competition, should be the primary objective of market economies, but more so with companies exhibiting monopolistic tendencies, as is the case with the Applicant.

22. Most economists recognise that competition does not predominate in our economy; yet most accept the results of competition as an ideal toward which we should strive. It is only fair that in the utility sector of the economy, <u>the standard established for regulation (Rate of Return) should be similar to that achieved under competition</u>. **This is where the Applicant's WACC is fundamentally flawed.**

23. Using this competitive standard, rate levels should be set so as to provide a well-managed utility the opportunity to recover all of its necessary costs, including **a fair return on the capital employed.** In the Applicant's case, it in large measure recovers its primary costs in the fuel charge and proposed customer charge. It is therefore in a privileged position.

24. Further, while under this standard, the utility may recover less than its full costs or more than its full costs in the short run. Over a long period of time the utility's total costs should generally be equated with total revenues.

25. When rates are adopted in accordance with this objective, the result will be an equitable and efficient balance between the interests of the utility and its investors, and the interests of the utility's customers. **Such a balance occurs naturally in the world of competition,** and is clearly a desirable goal for regulation in the public interest.

26. Consequently, it becomes clear that the general economic goal of regulation is to provide an opportunity for an efficiently managed utility to recover its full costs, including a fair return on its capital.

27. In most jurisdictions it is now generally agreed **that the fair rate of return is that percentage figure which, when applied to the rate base, will yield in dollars the net operating income which the utility should have the opportunity to earn.**

28. Further, with only minor exceptions, it is generally agreed that the resulting dollar figure for net operating income should be equal to the utility's cost of capital stated in dollars.

29. That is to say, the dollar amount which results from multiplying the rate of return by the rate base should be sufficient to pay the jurisdictional portion of the utility's interest costs, to pay preferred stock dividends, and to provide a reasonable return on common equity.

30. While these two terms are often used interchangeably, I distinguish between them, because they are not necessarily identical. There are two reasons for making this distinction.

31. First, a regulatory commission may wish to allow a rate of return which differs from the cost of capital, on the basis of its findings as to the quality of management or quality of service of a particular company.

32. Second, the cost of capital will differ from the fair rate of return if the definition of rate base is not comparable to the definition of total capital used in calculating the cost of capital. When viewed in this way, with the utility's cost of capital as a focal point, it is apparent that the fair rate of return is a percentage figure which will vary, depending upon the method used in calculating the rate base.

33. **If an original cost rate base is used, the fair rate of return will generally be equal to a composite, or weighted average, of the utility's cost of debt, preferred stock, and equity, with each of these cost rates being calculated on the basis of original cost.**

34. Conversely, if the utility is to be given an opportunity to earn the same dollar cost of capital from a fair value rate base, the appropriate fair return will differ from that which would be applied to an original cost rate base.

35. Commissioners, consider, for example, the utility's interest cost. If the book value of the utility's investment is $1,000, and 50% of this was provided by debt with an embedded interest cost of 8%, then the utility's interest costs amount to $40 per year.

36. Regardless of whether an original cost or fair value approach is used in calculating the rate base, the utility should logically be provided with $40 per year to recover its interest expense, no more and no less.

37. If an original cost evaluation method is used, the rate base will be valued at $1,000, and the half of the rate base which was provided by debt funds would be valued at $500.

38. Accordingly, the fair rate of return to apply to this portion of the rate base would be 8%. Applying this 8% fair return to the $500 value of the rate base, results in an income requirement of $40 which is the amount necessary to pay the interest.

39. However, if a fair value rate base is used, and the value of the rate base is determined to be $1,400, the value of the half of the rate base provided by debt would be $700. Hence, a fair return would not be 8%. Rather, the fair return would be 5.71%. ($40 divided by $700 equals 5.71%).

40. Put another way, there is nothing fair about applying an 8% rate of return to a fair value rate base, when this 8% figure is based upon the book value of the Company's debt and the property purchased with those debt funds.

41. The appropriate return on a fair value rate base must logically be less than the original (book) cost of capital.

42. What then is a fair rate of return or WACC for the Applicant? At the current rate it is earning a net profit of approximately $22 million at a WACC of 6.07 %, which was never advanced as inadequate in the current climate, especially when the Applicant is treated as a manufacturing concern with a corporate tax rate of 15

%. Neither Mr Camfield nor Mr O'Sheasy told us what was the tax rate of similar United States or Canadian companies.

43. I doubt whether any utility in either jurisdiction would be treated as favourably as the Applicant. The question then would be why an increased WACC as proposed by the Applicant when it is so favourably treated by Deferred Tax Credit and Manufacturing Tax Credit; again quite unlike the United States and Canada.

44. I would submit that if the proposed WACC of 10.48% is accepted by the Fair Trading Commission, then it puts a greater burden on the Commissioners to ensure that the Rate Base is accurate (though I am aware that it was agreed and accepted).

45. Using the Rate base of $544 million (for ease and convenience) with the Applicant's present debt/equity ratio of 22/78, at a WACC of 10.48% would yield an additional $12.54 million. However, if the proposed 35/65 ratio is used, even though it may never be achieved, the additional revenue would be $19.95 million.

46. So if the ratio of 35/65 is accepted, though not achieved, the increased revenue would not reflect the desired debt/equity ratio. The only beneficiary would be the shareholder the net cost of debt is actually the interest paid less the tax savings resulting from the tax-deductible interest payment. In the Applicant's case, the after – tax cost of debt is 1- 0.15 or 8.5%.

47. Looking at the submissions of fellow intervenor Dr Roland Clarke, I agree with his submission that in terms of the cost of equity, Mr Camfield used the US Treasury Bill as the risk-free rate in the calculation of the capital asset pricing model (CAPM). In Barbados, the Government Treasury rate is 5.02%.

48. The average cost of debt and equity in Barbados is therefore about 6.76 %. Given that in Barbados share prices do not react to market movements, at best the average cost of capital should not exceed 8%. With a WACC of 8%, with an unachievable 35/65 debt/equity ratio in the short-term, the Applicant would achieve an additional $15.23 million.

49. The additional $28 million in revenue proposed by the Applicant is predicated on a fiction of a 35/65 debt equity that is not achievable

in the short-term and on a North American experience of
competition that is not applicable to conditions in Barbados.

50. If indeed the operations of the applicant are the envy of other
utilities in the Caribbean and elsewhere, then it is a model that
should be exported and confirms that any attempt to change its
capital structure is nothing more than an ethnocentric imposition on
a well-run and efficient utility.

51. It is nothing more than a not so subtle attempt to extract the
maximum from its customers without the slightest additional inputs
from its shareholder who stands to benefit substantially should the
Commission go along with the proposal of the applicant in its
present form.

CLOSING

Mr Chairman, in my opening statement I said the Commission was
an agent of the society as a whole and should not intervene in ways
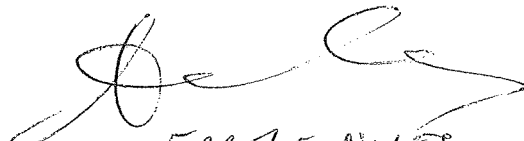that merely replicate private decision-making.

It is clear the applicant took a decision to apply for an increase in
rates principally on two (2) grounds: (a) that the last one was in
1983 and (b) that experts say that the WACC should be increased
to achieve greater revenue requirement. I submit these are not solid
bases for a rate increase. And the application should be rejected.

Further as I have already suggested I hope the Commission
acknowledges that calculating WACC is an imprecise science and
point estimates give the illusion of greater accuracy than is actually
justified.

The Applicant in its opening by Legal Counsel Sir Henry Forde,
QC, submitted that it was going to prove its case. On the contrary,
the Applicant has neither proved nor justified its case. It was based
on a hypothesis of a debt/equity ratio of 35/65 for which a
timeframe was not given and a proposed WACC of 10.48% which
is not only imprecise but based on an experience and statistical
foundation that are not applicable or relevant to the Barbadian
experience or that of the Applicant.

Among other requirements, it is submitted that where a parameter cannot be determined with certainty, the FTC must have regard to the need for persuasive evidence before adopting a value or method that differs from the previously adopted value or method. There must also be persuasive evidence to change the following WACC parameters and none has been provided by the Applicant. [END]

Dated 11th day of November

ERROL E. MILES

The Importance of WACC

WACC (Weighted Average Cost of Capital) is a key component when DCF fair value is calculated. Even small changes in WACC may cause significant change in DCF. WACC alone is not that important - nobody makes investment decisions based purely on WACC. To some extent you can even modify WACC-parameters to justify your own fair value with DCF. Still remember that this can be done only after you have done reality check with DCF that has not been modified.

WACC - Parameters

How should you set WACC-parameters? Here are some tips how it should be done:

Tax rate. Simply fill out your company's tax rate. Basically this is your company's home country's tax rate for companies. In Finland the tax rate is due to decrease to 26 % (from 29 %).

Target debt ratio (D/D+E). In many cases company has stated their target debt ratio. If your company hasn't, you can think what it could be. Try to stay away from extremes. Depending on company, the debt ratio is normally around 5-60 %. Do not confuse actual debt ratio for the target debt ratio. They are usually two completely different things, but we prefer to calculate WACC with long-term target instead of volatile actual values.

Cost of debt. Try to estimate what is the cost of debt of your company. Cost of debt varies according to company and economical situation. Try to estimate your company's cost of debt, if company doesn't tell it or it can not be reliably calculated from financial statements (sometimes the company includes such items in interest expences etc. that the calculated values do not tell the whole truth). This such as size, financial situation, profitability and possible credit rating affect the value. Normally cost of debt is about 0.25% - 1.5%-points more than risk free interest rate (for small/unprofitable companies somewhat more than with blue chips). If you have not better way to estimate the value, then you can e.g. assume that it is 0.75%-points more than long-term risk-free interest rate - and it probably is not very far away from truth. So if risk-free rate is 5%, then let cost of debt be 5.75%.

Equity beta. Describes what is the relative equity risk concerning your company (normally the risk of its business sector). The average beta is 1 and thus the companies that have about average risk have beta of 1. If the business is more risky (very cyclical, high fixed costs/operational leverage) then the beta is more than 1 (normally 1.1 - 1.5). This kind of businesses are e.g. internet business (high fixed costs, high operational risk), pulp and paper (cyclical and high fixed costs). If the business is less risky (very smooth: not cyclical and not very high operational risk) then the beta is below 1 (normally 0.6 - 0.9). This kind of businesses are real estate and food and beverage retail and production. We have made a table that has different betas for different businesses and it can be found right after this text. There's also other information about equity beta and its estimation. Normally you get biased betas if you estimate them from market data from illiquid companies or illiquid /not-so-diversified markets. Therefore it is normally better to estimate the beta yourself than to get it from market data. You can estimate them by assessing whether the company is more or less risky than some other industries whose beta you know.

Market risk premium. It describes the premium that equity investors tend to expect to get when

investing to equity markets compared to return they would get from risk-free investments - long-term government bonds. Normally equity research producers use hereby values between 3.5% - 5%, even though some academic research has suggested also that the premium might be as big as 6%. The problem is that there is no method to get/estimate the value in reality, so we just have to take some reasonable value here. It would also be important that the value would be about the same with every analyst and currently we recommend that this value would be 4.75; So use it until you hear otherwise.

Liquidity premium. It is introduced to WACC calculation to explain a difference between two types of financial securities, that have all the same qualities except liquidity. The extra return is demanded as a compensation for holding assets that may be difficult to convert into cash.

Risk free interest rate. Input the interest rate of government 10 year bond. For example Finland's government bond it is currently about 4,3 %. You should use the one of your country/your own currency area. The risk free interest rates varies a bit in different currency areas as the long-term interest rate holds inside the expectation about the future inflation. As the real interest rate (interest what people expect to get from risk free investments after inflation has been deducted) is about 3%, then the long-term risk free interest rate is currently: real interest rate + current long-term inflation expectation = 3% + 1.3% = 4.3%

Equity Beta

What is beta and what does it indicate?

Beta measures the risk of the company (and its stock) relative to the risk of the stock market in general - how risky is the type of business the firm does and how risky is the financial structure or leverage of the firm. With greater risk, as measured by a larger variability of returns (business or operating risk), the company's should have a larger beta. And with greater leverage (higher debt to value ratio) increasing financial risk, the company's stock should also have a larger beta. With a larger beta, an investor should expect a greater return. The beta of an average risk firm in the stock market is 1.00. Normally betas vary between 0,60 - 1,30, although they also can be much higher or lower.

Beta values of some businesses

These values are for your guidance, but they are not valid as they are. They should give you some direction of what could your company's beta be. You might want to use them as a starting point - after that you can consider other significant factors and modify your company's beta from that of subjective industry. Other important components that should be considered when "fine tuning" beta of your company can be found from the following chapter, beta and risk components.

Business sector	Beta	Unlevered beta
Internet	1,51	1,50
Semiconductor	1,34	1,31
Telecom equipment	1,21	1,17
Computer software & services	1,20	1,20
Air transport	1,10	0,83

Weighted Average Cost Of Capital - WACC

What Does *Weighted Average Cost Of Capital - WACC* Mean?

A calculation of a firm's cost of capital in which each category of capital is proportionately weighted. All capital sources - common stock, preferred stock, bonds and any other long-term debt - are included in a WACC calculation. All else help equal, the WACC of a firm increases as the beta and rate of return on equity increases, as an increase in WACC notes a decrease in valuation and a higher risk.

The WACC equation is the cost of each capital component multiplied by its proportional weight and then summing:

$$WACC = \frac{E}{V} * Re + \frac{D}{V} * Rd * (1 - Tc)$$

Where:
Re = cost of equity
Rd = cost of debt
E = market value of the firm's equity
D = market value of the firm's debt
V = E + D
E/V = percentage of financing that is equity
D/V = percentage of financing that is debt
Tc = corporate tax rate

Businesses often discount cash flows at WACC to determine the Net Present Value (NPV) of a project, using the formula:

NPV = Present Value (PV) of the Cash Flows discounted at WACC.

Investopedia explains *Weighted Average Cost Of Capital - WACC*

Broadly speaking, a company's assets are financed by either debt or equity. WACC is the average of the costs of these sources of financing, each of which is weighted by its respective use in the given situation. By taking a weighted average, we can see how much interest the company has to pay for every dollar it finances.

A firm's WACC is the overall required return on the firm as a whole and, as such, it is often used internally by company directors to determine the economic feasibility of expansionary opportunities and mergers. It is the appropriate discount rate to use for cash flows with risk that is similar to that of the overall firm.

The overall rate of return desired by all investors (stock and bond) in a company:

$$WACC = [K_e + K_d(D/E)] / [1 + D/E]$$

where the terms in the formula are defined in this WACC-a-tron:

K_e (desired return on equity): 0 %

K_d (desired return on debt): 0 %

D/E (debt-to-equity ratio): 0

W.A.C.C.: %

The *debt-to-equity ratio* measures the relative proportion of equity and debt used to finance a company's assets. The ratio provides an indication of the relationship between the capital contributed by creditors and that contributed by shareholders. A high ratio typically would demonstrate that the company has aggressively financed its growth through debt. The resulting interest expense can have a detrimental effect on earnings. The ratio also indicates the extent to which shareholders' equity can fulfill the company's obligations to creditors if liquidated.

The *Weighted Average Cost of Capital* (WACC) represents the rate a company is expected to pay in financing its assets. The WACC calculates the company's cost of capital by proportionately weighing the categories of capital, each of which would be in the form or debt or equity. The WACC for a company is the minimum that the company must earn on its assets to satisfy its owners and creditors.

The Value of the WACC for Investors

Capital funding for a company is derived from two sources: debt and equity. Within these two categories, companies may raise money through a variety of securities, including common and preferred equity, straight and convertible debt, warrants, options, and more. Each security holder seeks to generate a return on that investment. The WACC represents the return they can expect.

Ibbotson Associates' Data and Minority Discount Rates

Michael Annin, CFA

Background

The typical income based valuation approach involves the projection of a future cash flow stream that is discounted back to present value using an appropriate discount rate. This discount rate is typically referred to as a weighted average cost of capital (WACC). The WACC is defined as:

$$W A C C = w_E k_E + w_D k_D (1 - t)$$

$$
\begin{aligned}
w_E &= \text{Weight of equity in the capital structure} \\
k_E &= \text{Cost of equity} \\
w_D &= \text{Weight of debt in the capital structure} \\
k_D &= \text{Cost of debt} \\
t &= \text{Marginal tax rate}
\end{aligned}
$$

The cash flow stream that should be used to determine the value of the firm as a whole is defined as free cash flow. Free cash flow (FCF) is usually stated as:

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+ EBIT * (1-t)
+ Depreciation Expense
- Capital Expenditures
- Changes in Working Capital
+ Deferred Taxes
Free Cash Flow
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Free cash flow represents the funds that are flowing to the firm. Therefore, the appropriate discount rate to be used to calculate the ultimate value of the firm is the weighted average cost of capital. Free cash flow represents the stream of cash that the company generates that is translated into the company's ultimate

Decision No. C09-0290

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

DOCKET NO. 07A-447E

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF ITS 2007 COLORADO RESOURCE PLAN.

**ORDER REQUESTING COMMENTS ON
THE ISSUES RAISED AT THE MARCH 16, 2009
TECHNICAL CONFERENCE**

Mailed Date: March 18, 2009
Adopted Date: March 18, 2009

I.   BY THE COMMISSION

A.   Statement

1.   This matter comes before the Commission for consideration of the issues raised

by Concentric Energy Advisors, the Independent Evaluator in this case (IE), and Public Service

Company of Colorado (Public Service) at the Technical Conference held on March 16, 2009 at

1:30 p.m.[1] Now, being fully advised in the matter and consistent with the discussion below, we

invite the parties to comment on specific issues listed below on or before Monday, March 23,

2009 at 12:00 p.m.

B.   Background

2.   The following topics were discussed at the March 16, 2009 Technical Conference:

a)   Whether the 3.5 percent escalation rate for construction cost estimates for generic

resources, which was set by Decision No. C08-0929 (Phase I Decision) is appropriate, given the

recent economic downturn;

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[1] *See* Decision No. C09-0262, mailed March 11, 2009 (*Order Setting Additional Technical Conference*).

that occurred since we issued the Phase I Decision. The IE opined the assumption that costs of materials increase faster than the general inflation rate may no longer be correct.

5.   Section 40-6-112(1), C.R.S., states that the Commission may, at any time, rescind, alter, or amend any decision made by it. Rescission, alteration, or amendment of a Commission order requires a notice to the public utility affected and an opportunity to be heard. We therefore invite the parties in this case to comment on whether, in light of the recent economic downturn, it would be appropriate to amend the portion of the Phase I Decision which requires the two modelers to assume the 3.5 percent annual escalation rate. We request comment on whether the escalator applied to generic resources should be revised downward to 2.5 percent, so that there is no real increase in these prices (above inflation).[4]

6.   In addition, the IE recommended that the IE and Public Service be given the flexibility to decrease the expected generic representation of future solar costs, since a real decrease in these costs over time for this emerging technology is anticipated. We invite the parties to comment on this matter as well.

D.   Capital Structure to Model Utility Rate Based Proposals

7.   In the Phase I Decision, we directed Public Service and the IE to use Public Service's Weighted Average Cost of Capital (WACC) of 7.88 percent as the discount rate in the STRATEGIST model. The modelers use the discount rate to calculate the net present value of revenue requirements of each portfolio, which allows portfolios with different

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[4] *See Id.*, at ¶292(a) (directing the modelers to assume the 2.5 percent annual general inflation rate).

b)   Whether the Commission should address the capital structure that the IE and Public Service use to model company-owned resources and, if so, what capital structure should be used;

c)   Whether the recent communications issued to potential bidders by Public Service regarding capital lease treatment are consistent with the Phase I Decision;

d)   The general criteria that Public Service and the IE should use when addressing an issue that is not directly addressed in the Phase I Decision; and

e)   Transmission System Information submitted by Public Service on March 13, 2009 pursuant to Decision No. C09-0268.

3.   We request that the parties provide comments on the issues identified below. For each issue, we request that parties identify any modifications that they believe the Commission should make to its Phase I Decision pursuant to § 40-6-112(1), C.R.S.[2] We wish to address these issues in a ruling in time for bidders to factor our decision into their bids. Therefore, we require parties to file their comments on or before 12:00 p.m. on Monday March 23, 2009. We will rule on the merits of these issues at the next Commission Weekly Meeting.

C.   **Escalation Rate of Construction Cost Estimates**

4.   In the Phase I Decision, we directed the modelers to assume that the construction cost estimates for generic resource options used in the Phase II analysis will escalate at the rate of 3.5 percent annually from year 2008.[3] During the Technical Conference, the IE voiced a concern that this escalation rate is no longer appropriate given the dramatic economic downturn

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[2] As used here, "Phase I Decision" includes the decisions on Rehearing, Reargument, or Reconsideration, including Decision Nos. C08-1153, C08-1337, C09-0004, and C09-0216.

[3] *See* Decision No. C08-0929, mailed September 19, 2008 (*Phase I Decision*), at ¶292(c).

generation investments and different dynamics of construction and operation to be evaluated on a common basis.[5,6]

8.   During the Technical Conference, Public Service clarified that it proposes to use a ratio of 51 percent equity to 49 percent debt to model competing utility rate-based proposals. This ratio is described by Public Service as its "economic" target, which is an adjusted value calculated by rating agencies and used by the capital markets. Public Service stated that its current ratio (which is the value determined by the Commission in the last rate case) is approximately 60 percent equity to 40 percent debt. The difference is the imputed debt factor used by Standard & Poor. We discussed the imputed debt factor at length in the Phase I Decision. Presumably, a 51/49 capital ratio will yield a lower WACC than 60/40 since the cost of equity is higher than the cost of debt.

9.   We invite the parties to comment on whether we should direct the IE and Public Service to assume a capital structure to model company-owned resources and, if so, what capital structure should be used. With respect to this issue, we request comment on the following questions:

- Should we require Public Service and/or the IE to model the competing utility rate-based proposals using a WACC value of 7.88 percent, which is based on an approximate 60/40 capital structure?

- Should we permit the modelers to model the competing utility rate-based proposals using a WACC based on a capital structure that may exist after adjusting for utility ownership facilities and a change in the level of imputed debt due to decreased IPP ownership?

- What will be the likely value of the "regulatory" WACC assuming completion of the proposed utility assets?

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[5] *See Id.*, at ¶¶280, 287.

[6] Weighted average cost of capital is calculated by multiplying the percentage of debt to the total capital and the cost of debt as well as by multiplying the percentage of equity to the total capital and the cost of equity. The two values are then added. In this case, the 7.88 percent WACC was calculated by applying an approximate 60/40 equity/debt ratio.

- Should the WACC used to evaluate the utility rate-based proposals also be used for the discount rate in the modeling?

- Are there other approaches to this issue that the Commission should consider?

E.   Disqualification of Bids Based on Transmission Limitations

10.   In Decision No. C09-0268, we directed Public Service to file a summary of its Open Access Transmission Tariff information to better inform bidders of its transmission limitations. Public Service filed this document on March 13, 2009 and the IE discussed some of the items listed at the Technical Conference. At the Technical Conference, Public Service also provided additional clarification of timing and availability of specific lines. Public Service proposes to reject bids (which are required to be proposed for a certain year) if transmission is not available in that year. Further, bidders would enter a separate bid for each proposed start year, with a separate bid fee in order for a bid to be considered with different in-service dates. Now that we have better information about Public Service's proposed treatment of bids in view of transmission limitations, we invite the parties to comment on bid rejections due to these reported transmission limitations. We also request comments on whether we should re-open any aspects of this issue, or whether it was adequately addressed in Decision No. C09-0268.

F.   General Clarification Items

1.   General Working Relationship Between the IE, Public Service, and the Commission

11.   During the Technical Conference, we discussed the relationship between the two modelers and the general topic of how much latitude the IE should have in asserting a position. We also discussed what types of issues Public Service and the IE should be interpreting themselves, and which issues should be brought to the Commission for clarification. We invite comments on these issues.

2. Capital Lease

12.   During the Technical Conference, the IE indicated that, due to updated accounting information, Public Service intends to significantly alter the model contracts to avoid capital lease treatment. This raises the question of the extent to which Public Service and/or the IE should make changes in the model contract at this stage without Commission approval. For example, we had accepted model contracts that contained a reduction in the payment for energy in excess of 115 percent of a bidder's proposed peak energy level. We now clarify that our "acceptance" carries all the impact of approval except that the Commission does not endorse any specific provision for use in another proceeding. Public Service and the IE therefore must obtain Commission permission before changing any specific material terms in the model contract. To reiterate our previous decision, we directed Public Service and the IE not to reject a bid if a bidder proposes to change a term, and to address the issue in negotiations instead.[7]

II. ORDER

A. The Commission Orders That:

1.   We invite the parties to comment on the issues listed above on or before Monday, March 23, 2009 at 12:00 p.m.

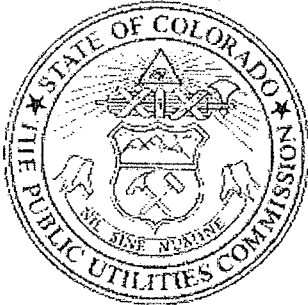2.   This Order is effective on its Mailed Date.

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[7] The proposed changes in contact terms with respect to capital lease issues are shown on Public Service's bidder website at:
http://www.xcelenergy.com/SiteCollectionDocuments/docs/PSCO_3-4_CommunicationtoPotentialBidders.pdf

B. ADOPTED IN COMMISSIONERS' WEEKLY MEETING March 18, 2009.

(S E A L)

ATTEST: A TRUE COPY

Doug Dean,
Director

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

RONALD J. BINZ

MATT BAKER

Commissioners

COMMISSIONER JAMES K. TARPEY
ABSENT.

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