BEFORE THE WASHINGTON

UTILITIES & TRANSPORTATION COMMISSION

In the Matter of the Petition of PUGET SOUND ENERGY, INC., and NORTHWEST ENERGY COALITION, For an Order Authorizing PSE To Implement Electric and Natural Gas Decoupling Mechanisms and To Record Accounting Entries Associated With the Mechanisms

DOCKETS UE-121697 & UG-121705

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

V.

PUGET SOUND ENERGY, INC.

DOCKETS UE-130137 & UG-130138

DIRECT TESTIMONY OF STEPHEN G. HILL (SGH-1T)

ON BEHALF OF

PUBLIC COUNSEL

APRIL 26, 2013

DIRECT TESTIMONY OF STEPHEN G. HILL (SGH-1T)
DOCKETS UE 121697, UG-121705 AND UE-130137 & UG-130138

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I. INTRODUCTION / SUMMARY

Q: Please state your name and business address.

A: My name is Stephen G. Hill. My business address is P.O. Box 587, Hurricane, West Virginia 25526 [hillassociates@gmail.com].

Q: By whom are you employed and in what capacity?

A: I am Principal of Hill Associates, a consulting firm specializing in financial and economic issues in regulated industries.

Q: On behalf of whom are you testifying?

A: I am testifying on behalf of the Public Counsel Section of the Washington Attorney General's Office (Public Counsel).

Q: Briefly, what is your educational background?

A: After graduating with a Bachelor of Science degree in Chemical Engineering from Auburn University in Auburn, Alabama, I was awarded a scholarship to attend Tulane Graduate School of Business Administration at Tulane University in New Orleans, Louisiana. There I received a Master's Degree in Business Administration. I have been awarded the professional designation of "Certified Rate of Return Analyst," by the Society of Utility and Regulatory Financial Analysts. This designation is based upon education, experience and the successful completion of a comprehensive examination. I have also served on the Board of Directors and am currently Vice President of that national organization.

Q: Have you testified before this or other regulatory commissions?

A: Yes, I have testified in this regulatory jurisdiction and, over the past 30 years, I have testified on cost of capital, corporate finance and capital market issues in more than 275 regulatory proceedings before the following regulatory bodies: the

West Virginia Public Service Commission, the Connecticut Department of Public Utility Control, the Oklahoma State Corporation Commission, the Public Utilities Commission of the State of California, the Pennsylvania Public Utilities Commission, the Maryland Public Service Commission, the Missouri Public Service Commission, the Public Utilities Commission of the State of Minnesota, the Ohio Public Utilities Commission, the Insurance Commissioner of the State of Texas, the North Carolina Insurance Commissioner, the Rhode Island Public Utilities Commission, the City Council of Austin, Texas, the Texas Railroad Commission, the Arizona Corporation Commission, the South Carolina Public Service Commission, the Public Utilities Commission of the State of Hawaii, the New Mexico Corporation Commission, the Texas Public Service Commission, the Georgia Public Service Commission, the Public Service Commission of Utah, the Kentucky Public Utilities Commission, the Illinois Commerce Commission, the Kansas Corporation Commission, the Indiana Utility Regulatory Commission, the Virginia Corporation Commission, the Montana Public Service Commission, the Public Service Commission of the State of Maine, the Public Service Commission of Wisconsin, the Vermont Public Service Board, the Federal Communications Commission and the Federal Energy Regulatory Commission. I have also testified before the West Virginia Air Pollution Control Commission regarding appropriate pollution control technology and its financial impact on the company under review and have been an advisor to the Arizona Corporation Commission on matters of utility finance.

Q: What is the purpose of your testimony in this proceeding?

A: Puget Sound Energy (PSE, the Company) is seeking approval from the Washington Utilities and Transportation Commission (WUTC) to implement a decoupling mechanism in both its electric and gas utility operations. The Company originally filed its decoupling request in October 2012. Then, in February PSE filed an Expedited Rate Filing (ERF) seeking to update its revenue requirements using its most recently-allowed capital structure, ROE and overall cost of capital. Finally, in March 2013, the Company filed an amended decoupling proposal, which requests a broader version of decoupling than that originally requested. On March 22, 2013, a global settlement was reached between the Company, Staff and the Northwest Energy Coalition involving the revised decoupling petition, PSE's expedited rate filing and the Commission's final order in the Centralia Coal Transition Power Docket. Although this Commission has recognized in prior Orders that decoupling lowers a utility's operational risk and should, therefore, call for a lower allowed return on equity (ROE)[1], the Company has made no proposal in either its original or amended decoupling proposal to adjust its currently allowed ROE of 9.8 percent to account for the lower risk imparted by a decoupling regulatory regime.

Because decoupling will lower the operating risk of PSE's electric and gas utility operations, unless there is some off-set to the currently allowed ROE (9.8%), which was awarded in the Company's last rate case under traditional rate base rate of return regulation, the interests of ratepayers and the Company will not be balanced. I have been asked to review the Company's current request for a decoupling mechanism and determine an appropriate ROE for PSE to be awarded with its requested decoupling regime.

Q: Please summarize the issue you are addressing and your findings.

A: In a decoupling regulatory regime, a utility company's revenues are separated (decoupled) from unit sales. Revenues no longer depend on the level of Mcf or KWh sales per customer, they are determined in the ratemaking process and customers rates are adjusted so that the utility's revenue requirements are realized no matter what the unit sales data.

Through decoupling, the operating risk associated with the volatility of the Company's revenue stream due to factors that cause customer usage to be different than expected (e.g., unusual climate conditions, economic downturns and conservation) will be shifted forward to customers. With decoupling, the ratepayer's rates will fluctuate and the utility will receive its expected revenues (without volatility).

The regulatory scenario with decoupling is very different from that under which PSE's current ROE was set. PSE's current ROE was set under traditional rate base/rate of return regulation in which per unit rates are set in the rate case process and the revenues are a function of sales. Under traditional regulation, if, for example, the economy goes into recession and customers are cautious about the amount of electricity they use, sales and the resultant revenues could decline, rates would not cover the utility's cost of service, and the Company would under-earn its allowed return. Under decoupling that condition is much less likely to

[1] *WUTC v. Puget Sound Energy, Inc.,* Dockets UE-111048 and UG-111049, Order 08 (May 7, 2012) ¶ 446 (hereafter "PSE 2011 GRC Final Order").

happen. Under decoupling if sales are down due to the economy (or any other reason) rates are increased so that the utility receives its expected revenues.

The best avenue through which the regulator can adequately compensate ratepayers for assuming the volatility risk shifted to them by decoupling is the allowed return on equity; and the best means through which the Commission can balance the interests of ratepayers and the Company when the Company's risks are reduced is to reduce the allowed ROE. Thus, in order to be commensurate with the lower risk associated with the implementation of decoupling, PSE's return on equity should be reduced from its current level of 9.80 percent.

Q: What are your recommendations with regard to the equity component to be included in a decoupling rate regime?

A: If the Commission approves the Company's requested decoupling ratemaking regime as proposed, I recommend that the Company's allowed return on common equity be reduced to 9.0 percent. By lowering the ROE, the Commission can best balance the interests of the Company and its ratepayers if decoupling is implemented.

II. ANALYSIS

Q: You mentioned that the Commission has previously recognized that decoupling lowers a utility's risk and that lower risk calls for a reduced ROE, correct?

A: Yes. In the Order in PSE's most recent general rate case, this Commission cited the policy set out in its Decoupling Policy Statement:

> By reducing the risk of volatility of revenue based on customer usage, both up and down, such a mechanism can serve to reduce risk to the company, and therefore to

> investors, which in turn should benefit customers by reducing a company's debt and equity costs. This reduction in costs would flow through to ratepayers in the form of rates that would be lower than they otherwise would be, as the rates would be set to reflect the assumption of more risk by ratepayers.[2]

In the cited statement, the Commission recognizes two key elements that are missing from the Company application in this proceeding. First, decoupling reduces risk to the regulated utility, and that reduction in risk would reduce the Company's cost of debt and common equity. Second, the Commission notes, "the reduction in risk would flow through to ratepayers in the form of rates that would be lower than they otherwise would be [.]"

In this proceeding, the Company is requesting a decoupling regime, which, according to the Commission's first tenet, would lower the Company's risk and would lower its cost of common equity capital. However, there is no second part—no follow-up. There is no commensurate compensation for ratepayers recognized in the Company's request for a decoupling rate scheme even though, as the Commission correctly notes, decoupling causes the "assumption of more risk by ratepayers."

The Commission's position on decoupling, risk and the allowed return is clear. Decoupling lowers risk and the cost of capital. Therefore, an allowed return appropriate for a decoupling regime should be lower than that appropriate for traditional rate base/rate of return regulation.

Q: In this proceeding, has the Commission Staff agreed that decoupling lowers a utility's risk and that lower risk calls for a reduced ROE?

[2] PSE 2011 GRC Final Order, ¶ 446.

A: Yes. Staff witness Deborah Reynolds confirms that fact in her testimony in this decoupling proceeding.

> Full decoupling should reduce substantially the utility's revenue risk by guaranteeing a specific amount of revenue per customer regardless of typical causes of fluctuations in revenue related to weather, economic conditions, or any other condition. Reduced revenue volatility reduces risk which should translate into lower capital costs, either as a lower required return or equity or the need for less equity in the utility's capital structure.[3]

However, Staff also indicates in testimony that the ROE should be adjusted in the context of a general rate case and, therefore, recommends waiting until the next GRC to reflect any downward adjustment to PSE's ROE—even though decoupling would be implemented now.

Q: Why is waiting to reflect a downward adjustment to ROE until the next general rate case problematic?

A: If the Commission elects not to adjust the allowed ROE outside of a full rate proceeding, then ratepayers will assume the Company's volatility risk *and* provide a return on equity that exceeds the company cost of equity capital. PSE's stockholder will be advantaged unnecessarily at ratepayer expense. That is, the entire time that rates set in this expedited rate proceeding are set (possibly a three-year period) ratepayers will be providing a return in rates that will be higher than the Company's cost of equity capital under decoupling. Moreover, those ratepayer monies will simply be forgone until rates are re-set in a general rate case.

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[3] Dockets UE- 121697/UG-121705, Direct Testimony of Deborah Reynolds, Exhibit No. JRD-1T, p. 8, ll. 23-26 and p. 9, ll. 1-2.

Q: What return on equity (ROE) is PSE currently allowed and when was that cost rate determined?

A: In the Company's most recent rate proceeding, Dockets UE-111048 and UG-11049, PSE was awarded a rate of return of 9.80 percent. At that time the Company was operating under a traditional rate base/rate of return ratemaking methodology. The Order in that proceeding was issued in May of 2012 and the cost of capital evidence presented by the witnesses in that proceeding (Olson, Elgin and Gorman) was based on market data ranging from October 2010 through April 2011 (Olson), and September 2011 through November 2011 (Elgin and Gorman). Therefore, although the Order in PSE's most recent rate proceeding was a little less than one year ago, the cost of capital data on which the Commission's determination was based came from early and late 2011.

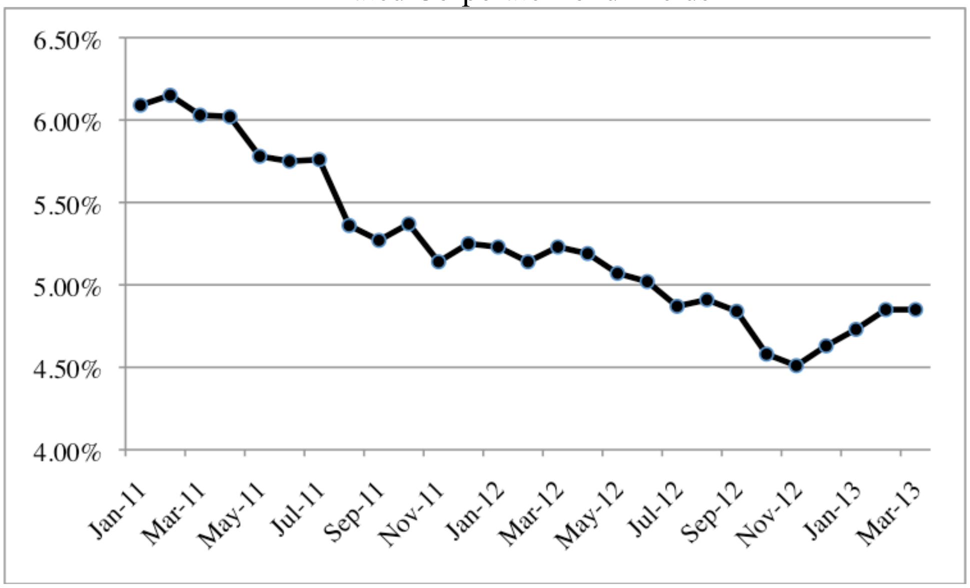
Q: Has the cost of capital declined since the time the evidence in PSE last rate case was prepared?

A: Based on the level of corporate bond yields, the indication is, yes, the current cost of capital is lower than it was during 2011 (the time period in which the market based cost of capital analyses were undertaken for PSE's last rate proceeding). Bond yields are indicators of capital cost movements and are often used directly to estimate the cost of equity capital in rate proceedings in Risk Premium analyses, where an appropriate equity risk premium is added to current bond yields. Therefore, bond yields changes are indicative of changes in the cost of equity capital.

As shown in Chart I below, based on BBB-rated corporate debt yields published by the Federal Reserve (Fed) in its Statistical Release H.15, capital costs have declined since 2011.

Chart I

BBB-Rated Corporate Bond Yields



Data from the Federal Reserve Statistical Release H.15, Historical Data.

Current bond yields are about 125 basis points below the levels that existed during the early part of 2011 and roughly 50 basis points below the level that existed during the latter portion of 2011 (when Staff and ICNU testimony was prepared). The available capital market evidence contained in corporate bond yields, therefore, indicates that current capital costs are substantially lower now than they were when the cost of capital estimates presented in PSE's last rate case were prepared.

Q: Has this Commission recognized in a recent order that capital costs are continuing to decline and that the current cost of equity for utilities may be lower than 9.8 percent?

A. Yes. In its recent Order in the Avista general rate proceeding[4], this Commission approved a settlement that contained an ROE of 9.8 percent--equivalent to that awarded PSE in its most recent rate proceeding. However, the Commission noted that absent the settlement it would have considered the fact that capital costs have declined, stating:

> The Settlement also stipulates a 9.8 percent ROE. Though that is consistent with what we have approved in recent cases involving other utilities, [footnote omitted] we note that equity returns continue to trend downward. [footnote omitted] If this case had been litigated, we may very well have decided that an ROE of less than 9.8 would be warranted.[5]

Q: Have you prepared a full cost of equity capital analysis in this proceeding?

A: No. Due to other commitments and the time constraints of this abbreviated proceeding, I am unable to undertake a full equity cost study. However, I can reference my most recent equity cost analysis for a BBB-rated electric utility (Southwestern Electric Power Company), which was undertaken in the fall of 2012 and was filed in December 2012.[6]

In that testimony I reviewed the market data of twelve publicly traded electric companies that had bond ratings between "BBB-" and "A-", had 70 percent of revenues from electric operations, were not involved in a merger, had consistent dividend payments, had generation assets and a stable book value. In assessing the cost of equity of those companies, I utilized Discounted Cash Flow,

[4] *WUTC v. Avista Corporation d/b/a Avista Utilities,* Dockets UE-120436 et. al., Order 09 (December 26, 2012) (hereafter Avista 2012 GRC Final Order).
[5] Avista 2012 GRC Final Order, ¶ 74.
[6] Texas Public Utilities Commission Docket No. 40443, Application of Southwest Electric Power Company for Authority to Change Rates and Reconcile Fuel Costs, Direct Testimony of Stephen g. Hill on Behalf of Cities Served by SWEPCO, December 10, 2012.

Capital Asset Pricing Model, Modified Earnings Price Ratio and Market-to-Book Ratio analyses, as I normally do. In that testimony I estimated the cost of common equity of those companies to range from 8.50 percent to 9.50 percent. Therefore, even the uppermost end of my recently-determined range of current equity cost for BBB-rated electric utilities (9.5%) would indicate that PSE's 9.8 percent is too high to represent the Company's current cost of equity capital.

There have been no major market dislocations or sharp changes in interest rates or stock prices since I performed that cost of equity analysis in the SWEPCO proceeding. Therefore, in my expert opinion, the current allowed return for PSE, 9.80 percent, exceeds the Company's current cost of equity capital and should be reduced.

Q: Mr. Hill have you previously presented testimony before this Commission quantifying the impact of decoupling on the cost of common equity capital?

A: Yes. I testified regarding cost of capital on behalf of Commission Staff in a previous PSE rate proceeding. In that case, based on an analysis of the Company's historical revenue volatility, I estimated that decoupling PSE's rates from kWh sales would lower the Company's cost of equity capital by approximately 50 basis points.[7]

Q: Given the fact that capital costs have declined since the Commission's determination of the allowed ROE in Puget's last rate case in combination with the fact that decoupling imparts lower operating risk to the Company,

[7] *WUTC v. PSE*, Dockets UE-060266/UG-060267, Direct Testimony of Steve Hill, Exhibit No. SGH-1TC, p. 4.

what ROE would be appropriate for the Company's proposed decoupling regime?

A: A 50 basis point decrement below the current allowed ROE to compensate ratepayers for the lower cost of capital afforded the Company, would indicate that a 9.3 percent ROE would be appropriate under a decoupling regime. In addition, as shown in Table I capital costs have declined since the cost of capital estimates were made in the last PSE rate proceeding.

Taking those factors into account as well as my own recent estimate of the cost of equity capital for BBB-rated electric utilities, an equity return of 9.0 percent would be reasonable for Puget under a decoupling ratemaking scenario. A 9.0 percent ROE is reasonable in that it affords the Company's ratepayers some benefits related to the lower operating risk that will be enjoyed by the Company as a result of the implementation of decoupling. In addition, it recognizes the fact that capital costs have declined since the Company's last rate proceeding. Finally, a 9.0 percent return is conservative (i.e., possibly too high) in that it is in the middle of a reasonable range of equity capital costs for BBB-rated electric utilities.

Q: Are there other factors under consideration in these proceedings that would affect the Company's operating risks and, therefore, an appropriate return on common equity?

A: Yes. In addition to its decoupling request, the Company has filed a request to implement a multi-year "K-factor" Rate Plan to be considered along with its decoupling proposal. That rate plan provides for automatic rate increases ("K-factor" escalators). If adopted, the multi-year K-factor Rate Plan would further reduce PSE's operating risk and would call for an even lower allowed ROE. My recommended 9.0 percent return on equity is based solely on 1) lower current capital costs, and 2) the shifting of risk away from the Company to ratepayers due to the implementation of decoupling (i.e., full decoupling without a "K-factor" automatic rate increase).

If the Commission is inclined to go beyond the Company's requested decoupling regime and adopt the "rate plan" that provides for annual rate increases and, if necessary, deferral of revenues, it should also recognize that such action would further reduce the Company's operating risk below that contemplated in PSE's last rate proceeding. That further reduction in risk would call for an even lower ROE that I am recommending here. As I noted above, the lowest end of a reasonable range of equity cost for BBB-rated electrics in today's capital cost environment is 8.5 percent. Therefore, assuming the Commission elects to adopt the "rate plan" there is room below 9.0 percent to lower the Company's allowed ROE to recognize that lower risk.

Q: With an ROE of 9.0 percent, what would be the overall return for ratemaking purposes?

A: Using the capital structure and embedded debt costs allowed in the Company's most recent rate proceeding, the appropriate overall rate of return (ROR) to be applied with decoupling would be 7.42 percent, as shown in Table I below. That overall return (7.42%) is 38 basis points below the overall return allowed PSE under traditional regulation in the Company's most recent rate case, 7.80 percent.

Table I

Overall Cost of Capital With Decoupling

	Share percent	Cost percent	Weighted Cost percent
Equity	48.00	9.00	4.32
Long-Term Debt	48.00	6.22	2.99
Short-Term Debt	4.00	2.68	0.11
OVERALL ROR			**7.42**

Q: Is it likely that the Company's embedded cost of long-term debt in the near-term future will be equal to the 6.22 percent determined in the last PSE rate proceeding?

A: Not in my opinion. Although the Company reports in response to a Public Counsel Data Request[8] that its embedded cost of long-term debt in April 2013 is equal to that currently allowed (6.22%), it is not likely that the embedded cost of long-term debt PSE expects to realize in the near-term future will be as high as 6.22 percent. There are several indications that the Company's embedded debt cost is likely to decline.

First, the current marginal cost of debt for BBB-rated electric utilities is well below the 6.22 percent rate now included in PSE rates. That fact is confirmed by PSE's 30- and 40-year debt issued in November of 2011, which has coupon rates of 4.34 percent and 4.7 percent, respectively. Also, the Financial Industry Regulatory Agency (FINRA- the largest independent regulator for all securities firms doing business in the United States) reports on its website that Puget's 7.02 percent series debt (originally issued in 1997) is currently trading at

[8] PSE Response to Public Counsel Data Request No. 57, Attachment C.

a price well above par ($129.9 market price per $100 par value) and providing investors a current yield of 4.248 percent.[9] So the current marginal cost of Puget's long-term debt is around 4.3 percent—well below its embedded cost of debt.

Second, as reported in PSE's 2012 S.E.C. Form 10-K filing,[10] the Company has $162 Million of debt to be refinanced in 2015 and $250 Million of debt to be refinanced in 2016. Also, as the Company noted in response to discovery,[11] Puget expects to issue additional debt in 2015 and 2016.[12] If interest rates continue to remain relatively low, those refunding needs and new debt issuances will provide the Company an opportunity to lower its embedded cost of debt.

It is important to note that the Company currently projects that the coupon rates on the debt it expects to issue in 2015 and 2016 will be similar to its current embedded cost rate.[13] However, projections of higher interest rates are predicated on a more rapid economic recovery in the U.S. have been commonplace over the past few years, and those forecasts have been wrong. In the absence of a strong economic recovery in the U.S., the projected bond yield increases have not occurred. In fact, as shown in Chart I, bond yields and capital costs have continued to decline as U.S. economic growth remains positive but relatively modest.

[9] http://cxa.gtm.idmanagedsolutions.com/finra/bondcenter/QuickScreener.aspx?ShowResult=true&BondType=Corporate&Symbol=PSD&YieldMin=&YieldMax=&CouponMin=&CouponMax=&MaturityMin=&MaturityMax=.
[10] PSE 2012 Form 10-K, p. 92.
[11] PSE Response to Public Counsel Data Request No. 9.
[12] The dollar amounts of the future debt issuances and timing are confidential and are not reported here.
[13] See PSE's Confidential Response to Public Counsel Data Request No. 009 in Dockets UE-121697 and UG-121705.

Therefore, while it is certainly possible that the U.S. economy could heat up and interest rates could rise as rapidly as the Company currently projects, I believe it more likely that a modest recovery will continue for some time and any interest rate increase that might occur will be modest. Under that scenario, the Company will have an opportunity to lower its embedded cost of debt while a higher cost is included in rates. In my view, this additional imbalance between the cost of utility service and the cost to consumers provides further justification for the Commission by reduce PSE's allowed ROE to 9.0 percent in order to recognize the lower equity risk afforded by decoupling as well the decline in the cost of capital since the Company's most recent rate proceeding.

Q: Are there means other than lowering the allowed ROE to address the lower risk afforded the Company by decoupling?

A: Yes. Another ratemaking methodology that could be used to address a reduction in the risk of a regulated utility and provide ratepayers some benefit of that risk reduction is to lower the ratemaking common equity ratio. Capital structure is a function of a firm's operating risk and if the operating risk changes, a change in capital structure is appropriate.

For example, assume a firm knows, with certainty, what its future revenues will be; that is, they are guaranteed. In that theoretical situation, the firm could be financed entirely with debt (a 100% debt capital structure) because there is no operating risk—future revenues are known with certainty. As those future revenues become less certain (more volatile) the operating risk of the firm increases and the appropriate amount of debt used in the capital structure (one that most cost-effectively capitalizes the firm's operations) declines. As a result, the amount of debt and equity used to efficiently capitalize operations is a function of the risk of those operations. Riskier firms are capitalized with more equity and less debt than firms that have lower operational risk. That is because, as operating risk increases and the volatility of the revenue stream rises, the probability that pre-tax earnings will not be sufficient to meet interest costs increases. In order to alleviate the problem of not meeting debt costs, the amount of debt used in the firm must decline.

The Regulatory Assistance Project (RAP) has recognized that adjusting capital structure is an alternative means to address the lower risk imparted by decoupling and provide ratepayers some benefits of that lower risk.[14] In fact RAP opines that reducing the ratemaking common equity ratio is a preferred method to balance the interests of ratepayers and the Company under a decoupling mechanism.

Q: In order to achieve the same rate relief (the same overall return) with an allowed ROE of 9.80 percent, how much lower would PSE's common equity ratio be?

A. As shown in Table II below, in order to achieve the same overall return 7.42 percent as lowering PSE's ratemaking ROE from 9.8 percent to 9.0 percent, the Company's capital structure would be 37.5 percent common equity and 62.5 percent total debt (long- and short-term debt).

[14] RAP "Decoupling Guide, Chapter 10, Revenue Regulation and Decoupling, pp. 36-40, http://www.raponline.org/document/download/id/861.

Table II

Overall Cost of Capital With Decoupling
Keeping ROE at 9.80 percent and Adjusting Capital Structure

	Share percent	**Cost percent**	**Weighted Cost percent**
Equity	37.50	9.80	3.675
Long-Term Debt	58.50	6.22	3.639
Short-Term Debt	4.00	2.68	0.107
OVERALL ROR			**7.421**

In my view, leaving the Company's capital structure as is and changing the ratemaking return on common equity (ROE) is a more direct method with which to address the risk inequalities caused by decoupling.

Q: Does this conclude your testimony, Mr. Hill?

A: Yes, it does.