EXHIBIT B: Evaluation Checklist for Natural Gas-Special Purchase Agreements

Summary

Financial Instrument or Contract Reviewed: Special Purchase Agreements with the Department of General Services (DGS) under the Natural Gas Services (NGS) Program. **Evaluation as of:** Evaluation of standard agreements under the program used as of June 2009 and beyond. **Evaluation Prepared By:** J. Plotts **Reviewed By:** M. Anguiano

Swaptions
Forward contracts
Futures contracts
Energy contracts
Other:
Describe

Natural Gas-Special-Purchase Agreement	s

Check as

Is this financial instrument is a derivative instrument under GASB 53?

	Reference Questions	Appropriate
Derivative instrument	1-3	Yes
Hybrid instrument	4-7	
Synthetic Guaranteed Investment Contract	8-14	
If a derivative instrument, is it excluded from scope?	15-19	Yes
This is not a derivative instrument		N/A
Is this an investment derivative or a potential hedging derivative?		Check one
Investment derivative	20	N/A
Potential hedging derivative: Existing or expected financial instrument?	21	
Existing or expected infanctal instrument?	21	N/A
For existing or expected financial instruments:	21-29	Check one
Effective hedge (hedge accounting applies): (1) Cash flow hedge Fair value hedge Indicate method used to document effectiveness		
Ineffective hedge (hedge accounting does not apply)		
For existing or expected commodity transactions:	30-37	Check one
Effective hedge (hedge accounting applies): (1) Cash flow hedge Fair value hedge Indicate method used to document effectiveness:		N/A N/A
Ineffective hedge (hedge accounting does not apply)		N/A

(1) Once determined to be an effective hedge, an eveluation must be performed each subsequent year to validate continued effectiveness.

Evaluation Checklist for:

Prepare an inventory of all energy contracts entered into by UCOP and its campuses

Refer to the GASB Statement No. 53-1 and 53-2 Outline for details

Note: A ttach comments as necessary for further discussion of the conclusion. Certain questions may not result in simple "yes" or "no" answers and the substance of the financial instrument or contract must be considered in in order to arrive at the conclusion.

Determine whether the financial instrument or contract qualifies as a derivative instrument. If so, evaluate whether it is a hedging derivative. If a hedging derivative, determine whether it is a cash flow or fair value hedge.

Does this Meet the Definition of a Derivative Instrument? (¶7-13)

	YES/ NO	Source Document/ X - Reference
 Does the financial instrument have settlement factors that include a) a reference rate and b) a notional amount? 	Yes, UC agrees to take delivery of agreed-upon amounts of natural gas - "take or pay." The campus is individually contracted to take the gas and must pay for the gas whether or not their facility can take or use the gas.	DGS NGS program Gas Services Agreement- Amendment for the Authorization of Special Purchases. , Section 3.4 establishes the "take or pay" criteria. "Take or pay" agreements are derivative contracts per GASB Q&A 4.
2. Is there leverage, i.e. little or no initial net investment?	Yes, there is no initial investment.	DGS NGS program Gas Services Agreement- Amendment for the Authorization of Special Purchases.
3. Are there net settlement provisions?	Yes	DGS NGS program Gas Services Agreement- Amendment for the Authorization of Special Purchases.

If "yes," to question 1-3, the financial instrument or contract is a derivative instrument. However, continue the evaluation beginning with question 15 to determine whether the type of financial instrument or contract is excluded from the scope of Statement No. 53.

If "no" to any one of questions 1-3, the financial instrument or contract is not be a derivative instrument. However, continue the evaluation beginning with question 4 to assess whether a hybrid instrument is involved.

If Not, Does this Meet the Definition of a Hybrid Instrument? (¶64)

4. Is this a situation where there may be a derivative instrument that accompanies, or is incorporated within, a companion document?

If "yes," to question 4, the financial instrument or contract may be a hybrid instrument and must be further evaluated. Continue the evaluation beginning with question 5 to determine whether the type of financial instrument or contract is is a hybrid instrument.

If "no" to question 4, the financial instrument or contract is not a hybrid instrument. However, continue the evaluation beginning with question 8 to determine whether an SGIC is involved.

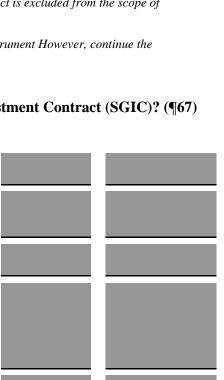
- 5. Is it a true statement that the companion instrument is not measured at fair value on the Statement of Net Assets?
- 6. Would a separate instrument with the same terms as a derivative instrument meet the definition of a derivative instrument using questions 1-3 above?
- 7. Is it a true statement that the economic characteristics and risks of the derivative instrument are not closely related to the economic characteristics and risks of the companion instrument?

If "yes" to all questions of 5-7 the financial instrument or contract is a hybrid instrument. However, continue the evaluation beginning with question 15 to determine whether the type of financial instrument or contract is excluded from the scope of Statement No. 53.

If "no" to any one of questions 4-6, the financial instrument or contract is not a hybrid instrument However, continue the evaluation beginning with question 8 to assess whether an SGIC is involved.

If Not, Does this Meet the Definition of a Synthetic Guaranteed Investment Contract (SGIC)? (¶67)

- 8. Does the SGIC prohibit the University from assigning or selling the contract or its proceeds to another party without the consent of the issuer?
- 9. Are prospective interest crediting rate adjustments provided to plan partcipants and UC on a designated pool of investments by a financially responsible third party?
- 10. Do the adjustments provide assurance that probable future rate adjustments would result in an interest crediting rate of less than zero is remote?
- 11. Do the pool of investments in total meet both of the following criteria? * The pool is of high credit quality such that the possibility of credit loss is remote? * The pool may be prepaid or otherwise settled in such a way that UC and its plan participants would recover contract value?
- 12. Do the terms of the SGIC require all permitted participant-initiated transactions with UC to occur at contract value with no conditions, limits, or restrictions? (permitted participant-initiated transactions are those transactions allowed by UC, such as withdrawals for benefits, loans, or transfers to other investment choices)
- 13. Some events may limit UC's ability to transact with participants at contract value. Examples are premature termination of contracts, layoffs, plan terminations, bankruptcies, and early retirement incentives. Is the probability of such an event occurring within one year of the date of the financial statements remote?
- 14. Does UC allow participants reasonable access to their investments?



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If "yes" to all questions of 8-14 the financial instrument or contract is an SGIC under Statement No. 53. Measure at contract value and disclose in accordance with that Statement. The evaluation does not continue.

If "no" to any of questions 8-14, the financial instrument or contract is not an SGIC under Statement No. 53. The evaluation does not continue.

If this Meets the Definition of a Derivative Instrument, is it Excluded from the Scope of GASB Statement No. 53? (¶14-18)

- 15. Is the derivative instrument a normal purchase or sale contract for a commodity used in the normal course of operations? Consider whether the contract results in the purchase or sale of a commodity such as natural gas or electricity, whether the contract includes a net settlement feature, whether the University has entered into such a contract in the past, whether the University has a practice of taking delivery or selling a commodity, and whether the quantity of the commodity in the contract is consistent with the volume used in the University's activities.
- 16. Is this a risk financing or insurance related contract?
- 17. Is this a financial guarantee contract that does not respond to changes in a reference rate?
- 18. Is this a specific type of contract that is not exchange traded and includes a reference rate based upon climate, geological, other physical variables, or the price of a nonfinancial asset?
- 19. Is this a loan commitment contract?

If "yes" to any one of questions 15-19, the financial instrument or contract is excluded from the scope of Statement No. 53 and the evaluation does not continue.

However, if "no" to all of questions 14-19, the financial instrument or contract is a derivative instrument that must be further evaluated under Statement No. 53 to determine whether it is an "investment derivative" or a "hedging derivative," and if a "hedging derivative," whether it is "effective" or "ineffective" hedge. Begin the next stage of the evaluation with question 20.

Determine Whether the Derivative Instrument is an "Investment Derivative" or a Potential "Hedging Derivative'' (¶20)

20. Was the derivative instrument or contract entered into for the purpose of making a N/A N/A profit?

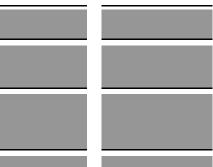
If "yes" to question 20, the financial instrument or contract is an investment derivative under Statement No. 53. Apply investment derivative financial reporting treatment and disclosures as outlined in the IRM.

If "no" to question 20, the financial instrument or contract is a hedging derivative and must be further evaluated to determine whether it is an "effective" or "ineffective" hedge. Begin the next stage of the evaluation with question 30.

21. Is the hedgeable item an existing or expected financial instrument?

If "yes" to question 21, skip to question 24 and continue the evaluation.

If "no" to question 21, the hedgeable item item is an existing or expected commodity transaction. Skip to question 30. Derivative Instruments - IRM 53.2 02/12/10



NGS Risk

Management

Protocol limits the

exposure to 100% of

the monthly

forecasted gas

volume.

Yes, purchases

are to meet

existing campus

forecasted gas

needs, routinely

entered into by

campuses who take delivery.



Evaluate Whether the Potential Hedging Derivative Where the Hedgeable Item is a Existing or Expected Financial Instrument is an "Effective" or Ineffective" Hedge. (¶34-48)

If the derivative instrument is an interest rate swap or forward contract, determine whether it is "effective" under the Consistent Critical Terms Method by continuing with question 22a, 23a or 24a.

Based upon the answers to the following, determine whether the Consistent Critical Terms Method of evaluating an interest rate swap or forward contract results in an "effective" hedge:

EXISTING OR EXPECTED FINANCIAL INSTRUMENTS

Consistent Critical Terms Method

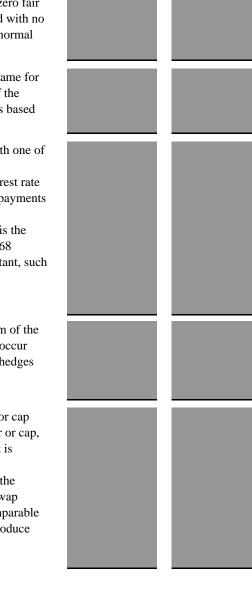
For an "effective" interest rate swap-cash flow hedge (¶37):

- 22a. Is the notional amount of the interest rate swap the same as the principal amount of the hedgeable item throughout the life of the hedging relationship? This criterion is met if the notional amount of the interest rate swap and principal amount of the hedgeable item are equal for each hedged interest payment, even if the hedged item amortizes or otherwise adjusts subsequent to the inception of the hedge.
- 22b. Upon association with the hedgeable item, does the interest rate swap have a zero fair value? (the value of a derivative instrument that is either entered into or exited with no consideration being exchanged. A zero fair value should be within a dealer's normal bid/offer spread.)
- 22c. Is the formula for computing net settlements under the interest rate swap the same for each net settlement? (That is, the fixed rate is the same throughout the term of the interest rate swap. Likewise, each variable payment of the interest rate swap is based on the same variable, such as the same reference rate or index.)
- 22d. Is the reference rate of the interest rate swap's variable payment consistent with one of the following:

(1) The reference rate or payment of the hedgeable item. For example, an interest rate swap provides variable payments to the University equal to the total variable payments of variable-rate bonds—a cost-of-funds hedge.

(2) A benchmark interest rate as specified in paragraph 35 if interest rate risk is the hedged risk. The reference rate cannot be multiplied by a coefficient, such as 68 percent of LIBOR, but it may be adjusted by addition or subtraction of a constant, such as the SIFMA swap index plus 10 basis points, provided that the constant is specifically attributable to the effects of state-specific tax rates.

- 22e. Do interest receipts or payments of the interest rate swap occur during the term of the hedgeable item, and no interest receipts or payments of the interest rate swap occur after the term of the hedgeable item? (For example, an interest rate swap that hedges the first 10 years of a 15-year variable-rate bond meets this criterion.)
- 22f. Is it true that the reference rate of the interest rate swap does not have a floor or cap unless the hedgeable item has a floor or cap. (If the hedgeable item has a floor or cap, does the interest rate swap have a floor or cap on the variable interest rate that is comparable to the floor or cap on the hedgeable item? (Comparable does not necessarily mean equal. For example, an interest rate swap's reference rate is the SIFMA swap index, while the hedgeable bond's variable rate is the SIFMA swap index plus 2 percent. A 10 percent cap on the interest rate swap would be comparable to a 12 percent cap on the bonds and would meet this criterion as both caps produce equal changes in cash flows if the SIFMA swap index exceeds 10 percent.)



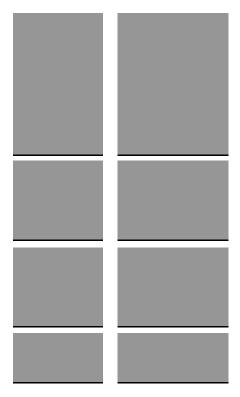
- 22g. Is the time interval of the reference rate, commonly referred to as the designated maturity, employed in the variable payment of the interest rate swap the same as the time interval of the rate reset periods of the hedgeable item? (Examples that meet this criterion include an interest rate swap with a variable payment referenced to (1) the SIFMA swap index—a seven-day index—that hedges variable-rate bonds with a rate reset every seven days and (2) an interest rate swap with a variable payment referenced to the one-month LIBOR index that hedges taxable variable-rate bonds with a monthly rate reset.)
- 22h. Are the frequency of the rate resets of the variable payment of the swap and the hedgeable item the same? (For example, this criterion is met by an interest rate swap with a reference rate that resets monthly and hedges bonds with a variable interest rate that also resets monthly.)
- 22i. Are the rate reset dates of the interest rate swap within six days of the rate reset dates of the hedgeable item? (For example, this criterion is met by an interest rate swap with a reference rate that resets on the 15th day of the month that hedges bonds with a variable interest rate that resets on the 18th day of the month.)
- 22j. Are the periodic interest rate swap payments within 15 days of the periodic payments of the hedgeable item?

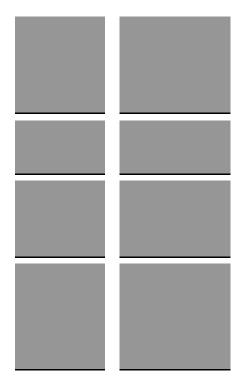
If "yes" to all of questions 22a-j, the interest rate swap is an "effective" <u>cash flow hedge</u> under the Consistent Critical Terms Method. Apply hedging derivative financial reporting treatment and disclosures as outlined in the IRM.

If "no" to any one of questions 22 a-j, the interest rate swap is not an "effective" <u>cash flow hedge</u> under the Consistent Critical Terms Method and must be further evaluated. Begin the next stage of the evaluation with question 23.

For an "effective" interest rate swap-fair value hedge (¶38):

- 23a. Is the notional amount of the interest rate swap the same as the principal amount of the hedgeable item throughout the life of the hedging relationship? (This criterion is met if the notional amount of the interest rate swap and principal amount of the hedgeable item are equal over the entire term of the hedgeable item, even if the hedgeable item amortizes or otherwise adjusts subsequent to the inception of the hedge.)
- 23b. Upon association with the hedgeable item, does the interest rate swap have a zero fair value?
- 23c. Is the formula for computing net settlements under the interest rate swap the same for each net settlement? (That is, the fixed rate is the same throughout the term of the interest rate swap. Likewise, each variable payment of the interest rate swap is based on the same variable, such as the same reference rate or index.)
- 23d. Is it true that the interest rate swap that hedges interest rate risk has a variable payment based on a benchmark interest rate without multiplication by a coefficient, such as 68 percent of LIBOR? (The benchmark interest rate, however, may be adjusted by addition or subtraction of a constant, such as the SIFMA swap index plus 10 basis points, provided that the constant is specifically attributed to the effect of state-specific tax rates.)





23e. Is it true that the hedgeable item is not prepayable? (that is, the hedgeable item is not able to be settled by either party prior to its scheduled maturity). This criterion does not apply to a call option in an interest-bearing hedgeable item that is matched by a mirror-image call option in an interest rate swap if both of the following criteria are met:

(1) A mirror-image call option matches the terms of the call option in the hedgeable item. The terms include maturities, strike price, related notional amounts, timing and frequency of payments, and dates on which the instruments may be called.(2) The University is the writer of one call option and the holder (or purchaser) of the other call option.

- 23f. Is the expiration date of the interest rate swap on or about the maturity date of the hedgeable item so that the University will not be exposed to interest rate risk or market risk?
- 23g. Is it true that the reference rate of the interest rate swap has neither a floor nor a cap?
- 23f. Does the reference rate of the interest rate swap reset at least every 90 days so that the variable payment or receipt is considered to be at a market rate?

If "yes" to all of questions 22a-f, the interest rate swap is an "effective" <u>fair value hedge</u> under the Consistent Critical Terms Method. Apply hedging derivative financial reporting treatment and disclosures as outlined in the IRM.

If "no" to any one of questions 23 a-f, the interest rate swap is not an "effective" <u>fair value hedge</u> under the Consistent Critical Terms Method and must be further evaluated. Begin the next stage of the evaluation with question 24a.

For an "effective" forward contract-cash flow hedge (¶39):

24a. Is the object of the hedge an <u>existing</u> single asset or liability, or group of assets and liabilities, that are currently measured at fair value on the SRECNA, such as debt or equity securities denominated in a foreign currency?

If "yes" to question 24a, the derivative instrument is an investment derivative. Apply investment derivative financial reporting treatment and disclosures as outlined in the IRM.

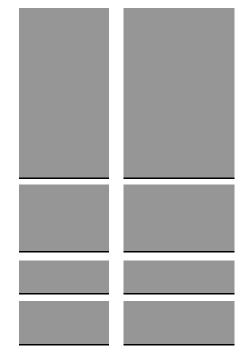
If "no" to question 24a, continue to 24b.

24b. Is the object of the hedge an <u>expected</u> single asset or liability, or group of assets and liabilities, that are <u>not</u> currently measured at fair value on the SRECNA, such as the future purchase of debt or equity securities denominated in a foreign currency?

If "yes" to question 24b, a hedgeable item exists and therefore continue the evaluation to 24c to determine whether the potential hedging derivative is "effective".

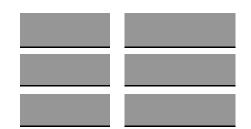
If "no" to question 24b, the derivative instrument is an investment derivative. Apply investment derivative financial reporting treatment and disclosures as outlined in the IRM.

- 24c. Is the forward contract for the purchase or sale of the same quantity or notional amount and at the same time as the hedgeable item?
- 24d. Upon association with the hedgeable item, does the forward contract have a zero fair value?
- 24e. Is the reference rate of the forward contract consistent with the reference rate of the hedgeable item?









If "yes" to all of questions 24c-e, the forward contract is an "effective" <u>cash flow hedge</u> under the Consistent Critical Terms <i>Method. Apply hedging derivative financial reporting treatment and disclosures as outlined in the IRM. Discontinue the evaluation.

If "no" to any one of questions 24a-c, the forward contract is not an "effective" <u>cash flow hedge</u> under the Consistent Critical Terms Method. Do not apply hedging derivative financial reporting treatment. Apply investment derivative financial reporting treatment and disclosures as outlined in the IRM. Discontinue the evaluation.

Quantitative Methods

If the interest rate swap or forward contract is not "effective" under the Consistent Critical Terms Method, continue the evaluation using at least one of the quantitative methods discussed below.

Synthetic instrument method-cash flow hedge (¶42-43):

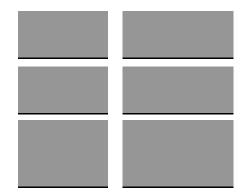
- 25a. Is the notional amount of the potential hedging derivative instrument the same as the principal amount of the associated variable-rate asset or liability throughout the life of the hedging relationship? (This criterion is met if the notional amount of the swap and principal amount of the hedgeable item match for each hedged interest payment, even if the hedged item amortizes or otherwise adjusts subsequent to the inception of the hedge.)
- 25b. Upon association with the variable-rate asset or liability, does the potential hedging derivative instrument have a zero fair value or is the forward price at-the-market?
- 25c. Is the formula for computing net settlements under the potential hedging derivative instrument the same for each net settlement; that is, the same fixed rate, reference rate, and constant adjustment, if any, throughout the term of the potential hedging derivative instrument?
- 25d. Do the interest receipts or payments of the potential hedging derivative instrument occur during the term of the variable-rate asset or liability, and no interest receipts or payments occur after the term of the variable-rate asset or liability? (For example, a swap that hedges the first 10 years of a 15-year variable-rate bond meets this criterion.)

a.)
b.)
b.)
c.)
<lic.)
c.)
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c.)
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If "yes" to all of questions 25a-d, the Synthetic Instrument Method may be applied to evaluate the effectiveness of a potential hedging derivative. Continue with question 26.

If "no" to any one of questions 25a-d, the Synthetic Instrument Method may not be applied to evaluate the effectiveness of a potential hedging derivative. Skip to question 27 for another quantitative method.

- 26. Under the synthetic instrument method, a potential hedging derivative instrument is effective if the actual synthetic rate is substantially fixed. The results of this analysis should be evaluated as follows:
- 26a. Is the actual synthetic rate within a range of 90 to 111 percent of the fixed rate of the potential hedging derivative instrument?
- 26b. If the actual synthetic rate is outside the required range for the current reporting period, the actual synthetic rate should be calculated on a life-to-date basis. Is the actual synthetic rate on a life-to-date basis within the required range?



26c. If a short time period has elapsed since inception of the hedge and the actual synthetic rate is outside the required range, the evaluation may include hypothetical payments, as if the hedge had been established at an earlier date. Effectiveness should then be reevaluated. For example, the first reporting period ends 90 days into a 10-year hedge, and when the government prepares its financial statements, it finds that the actual synthetic rate for the 90-day period is outside the 90 to 111 percent range. In that case, hypothetical payments from periods prior to the establishment of the hedge may be added to the evaluation. Does that analysis show a synthetic rate within the required range?



If "yes" to any of questions 26a-c, the derivative instrument is an "effective" <u>cash flow hedge</u> under the Synthetic Instrument *Method. Apply hedging derivative financial reporting treatment and disclosures as outlined in the IRM.*

If "no" to any one of questions 26a-c, the derivative instrument is not an "effective" <u>cash flow hedge</u> under the Synthetic Instrument Method and must be further evaluated. Skip to question 27 for another quantitative method.

Dollar-offset method-fair value or cash flow hedge (¶44):

27. The dollar-offset method evaluates effectiveness by comparing the changes in expected cash flows or fair values of the potential hedging derivative instrument with the changes in expected cash flows or fair values of the hedgeable item. This evaluation may be made using changes in the current period or on a life-to-date basis. Do changes in either the hedgeable item or the potential hedging derivative instrument divided by the other result within a range of 80 to 125 percent in absolute terms?

If "yes" to question 27, the derivative instrument is an "effective" as either a <u>cash flow or fair value hedge</u> under the Dollar Offset Method. Apply hedging derivative financial reporting treatment and disclosures as outlined in the IRM.

If "no" to question 27, the derivative instrument is not an "effective" cash flow <u>or fair value hedge</u> under the Dollar Offset Method and must be further evaluated. Skip to question 28 for another quantitative method.

Regression analysis method (¶**45-47):**

Cash flow hedges. If a potential hedging derivative instrument is employed as a cash flow hedge, the relationship analyzed should be relevant cash flows, rates, or fair values of the potential hedging derivative instrument and the hedgeable item. See $\P46$.

Fair value hedges. If a potential hedging derivative instrument is employed as a fair value hedge, the relationship analyzed should be the changes in fair values of the potential hedging derivative instrument and the hedgeable item.

- 28. For either a cash flow or fair value hedge, under the regreession analysis method:
- 28a. Is the R-squared of the regression analysis is at least 0.80?
- 28b. Does the F-statistic calculated for the regression model demonstrate that the model is significant using a 95 percent confidence interval?

28c. Is the regression coefficient for the slope is between -1.25 and -0.80?



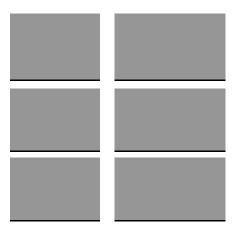
If "yes" to all of questions 28a-c, the derivative instrument is either an "effective" <u>cash flow hedge</u> or <u>fair value hedge</u> under the Regression Analysis Method. Apply hedging derivative financial reporting treatment and disclosures as outlined in the IRM.

If "no" to any one of questions 28a-c, the derivative instrument is not an "effective" <u>cash flow or fair value hedge</u> under the Regression Analysis Method and must be further evaluated. Skip to question 29 for another quantitative method.

Other Quantitative Methods (¶48):

The University may use a quantitative method to evaluate effectiveness not specifically identified in Statement No. 53 if the method meets all of the following criteria:

- 29a. Through identification and analysis of critical terms, does the method demonstrates that the changes in cash flows or fair values of the potential hedging derivative instrument substantially offset the changes in cash flows or fair values of the hedgeable item?
- 29b. Can replicable evaluations of effectiveness be generated that are sufficiently complete and documented such that different evaluators using the same method and assumptions would reach substantially similar results?
- 29c. Have the substantive characteristics of the hedgeable item and the potential hedging derivative instrument that could affect their cash flows or fair values been considered?



If "yes" to all of questions 29a-c, another quantitative method may be used to demonstrate effectiveness.

If "no" to any of questions 29a-c, another quantitative method may not be used to demonstrate effectiveness.

EXISTING OR EXPECTED COMMODITY TRANSACTIONS

Based upon the answers to the following, determine whether the Consistent Critical Terms Method of evaluating a commodity asset or expected transaction results in an "effective" hedge:

Consistent Critical Terms Method

For an "effective" commodity swap-cash flow hedge (¶51):

30a. Is the commodity swap for the purchase or sale of the same quantity (notional amount) of the same hedgeable item at the same time and delivery location as the hedgeable item?	N/A	N/A
30b. Upon association with the hedgeable item, does the commodity swap have a zero fair value?	N/A	N/A
30c. Is the reference rate of the commodity swap consistent with the reference rate of the hedgeable item. (For example, a commodity swap hedges the University's natural gas purchases at the Henry Hub pricing point. That commodity swap also should have a reference rate based on the Henry Hub pricing point to meet this criterion.)	N/A	N/A
30d. Is it true that the reference rate of the commodity swap does not have a floor or cap unless the hedgeable item has a floor or cap? (Floors and caps place limits on expected cash flows. If the hedgeable item has a floor or cap, the commodity swap has a comparable floor or cap on the variable commodity price.)	N/A	N/A

If "yes" to all of questions 30a-d, the interest rate swap is an "effective" <u>cash flow hedge</u> under the Consistent Critical Terms Method. Apply hedging derivative financial reporting treatment and disclosures as outlined in the IRM.

If "no" to any one of questions 30 a-d, the interest rate swap is not an "effective" <u>cash flow hedge</u> under the Consistent Critical Terms Method and must be further evaluated. Begin the next stage of the evaluation with question 31.

For an "effective" commodity swap-fair value hedge (¶52):

31a. Is the commodity swap for the purchase or sale of the same quantity (notional amount) of the same hedgeable item at the same time and delivery location as the hedgeable item?	N/A	N/A
31b. Upon association with the hedgeable item, does the commodity swap have a zero fair value?	N/A	N/A
 31c. Is it true that the hedgeable item is not prepayable? (that is, the hedgeable item is not able to be settled by either party prior to its scheduled maturity). This criterion does not apply to a call option in an interest-bearing hedgeable item that is matched by a mirror-image call option in a commodity swap if both of the following criteria are met: (1) A mirror-image call option matches the terms of the call option in the hedgeable item. The terms include maturities, strike price, related notional amounts, timing and frequency of payments, and dates on which the instruments may be called. (2) The University is the writer of one call option and the holder (or purchaser) of the other call option. 	N/A	N/A
31d. Is the expiration date of the commodity swap on or about the maturity date of the hedgeable item so that the University will not be exposed to interest rate risk or market risk?	N/A	N/A
31e. Is it true that the reference rate of the commodity swap has neither a floor nor a cap?	N/A	N/A
31f. Does the reference rate of the commodity swap reset at least every 90 days so that the variable payment or receipt is considered to be at a market rate?	N/A	N/A

If "yes" to all of questions 31a-f, the commodity swap is an "effective" <u>fair value hedge</u> under the Consistent Critical Terms Method. Apply hedging derivative financial reporting treatment and disclosures as outlined in the IRM.

If "no" to any one of questions 31 a-f, the commodity swap is not an "effective" <u>fair value hedge</u> under the Consistent Critical Terms Method and must be further evaluated. Begin the next stage of the evaluation with question 33a.

For an "effective" commodity forward contract-cash flow hedge (¶53):

32a. Is the forward contract for the purchase or sale of the same quantity or notional amount and at the same time as the hedgeable item?	N/A	N/A
32b. Upon association with the hedgeable item, does the forward contract have a zero fair value?	N/A	N/A
32c. Is the reference rate of the forward contract consistent with the reference rate of the hedgeable item?	N/A	N/A

If "yes" to all of questions 32a-c, the commodity forward contract is an "effective" cash flow <u>hedge</u> under the Consistent Critical Terms Method. Apply hedging derivative financial reporting treatment and disclosures as outlined in the IRM.

If "no" to any one of questions 32 a-c, the commodity forward contract is not an "effective" cash flow <u>hedge</u> under the Consistent Critical Terms Method and must be further evaluated. Begin the next stage of the evaluation with question 33a.

Quantitative Methods

If the commodity swap or forward contract is not "effective" under the Consistent Critical Terms Method, continue the evaluation using at least one of the quantitative methods discussed below.

Synthetic instrument method-cash flow hedge (¶56-57):

33a. Is the notional amount of the potential hedging derivative instrument the same as the quantity of the hedgeable item?	N/A	N/A
33b. Upon association with the hedgeable item, does the potential hedging derivative instrument have a zero fair value or is the forward price at-the-market?	N/A	N/A

If "yes" to all of questions 33 a-b, the Synthetic Instrument Method may be applied to evaluate the effectiveness of a potential hedging derivative. Continue with question 34.

If "no" to any one of questions 33 a-b, the Synthetic Instrument Method may not be applied to evaluate the effectiveness of a potential hedging derivative. Skip to question 35 for another quantitative method.

34. Under the synthetic instrument method, a potential hedging derivative instrument is effective if the actual synthetic rate is substantially fixed. The results of this analysis should be evaluated as follows:	N/A	N/A
34a. Is the actual synthetic rate within a range of 90 to 111 percent of the fixed rate of the potential hedging derivative instrument?	N/A	N/A
Dollar-offset method-fair value or cash flow hedge (¶58):		
35. The dollar-offset method evaluates effectiveness by comparing the changes in expected cash flows or fair values of the potential hedging derivative instrument with the changes in expected cash flows or fair values of the hedgeable item. This evaluation may be made using changes in the current period or on a life-to-date basis. Do changes in either the hedgeable item or the potential hedging derivative instrument divided by the other result within a range of 80 to 125 percent in absolute terms?	N/A	N/A

If "yes" to question 35, the derivative instrument is an "effective" as either a <u>cash flow or fair value hedge</u> under the Dollar Offset <i>Method. Apply hedging derivative financial reporting treatment and disclosures as outlined in the IRM.

If "no" to question 35, the derivative instrument is not an "effective" cash flow <u>or fair value hedge</u> under the Dollar Offset Method and must be further evaluated. Skip to question 36 for another quantitative method.

Regression analysis method (¶59):

Cash flow hedges. If a potential hedging derivative instrument is employed as a cash flow hedge, the relationship analyzed should be relevant cash flows, rates, or fair values of the potential hedging derivative instrument and the hedgeable item. See $\P60$.

Fair value hedges. If a potential hedging derivative instrument is employed as a fair value hedge, the relationship analyzed should be the changes in fair values of the potential hedging derivative instrument and the hedgeable item.

For either a cash flow or fair value hedge, under the regreession analysis method:

36a. Is the R-squared of the regression analysis is at least 0.80?	N/A	N/A
36b. Does the F-statistic calculated for the regression model demonstrate that the model is significant using a 95 percent confidence interval?	N/A	N/A
36c. Is the regression coefficient for the slope is between -1.25 and -0.80 ?	N/A	N/A

If "yes" to all of questions 36a-c, the derivative instrument is either an "effective" <u>cash flow hedge or fair value hedge</u> under the Regression Analysis Method. Apply hedging derivative financial reporting treatment and disclosures as outlined in the IRM.

If "no" to any one of questions 36a-c, the derivative instrument is not an "effective" <u>cash flow or fair value hedge</u> under the Regression Analysis Method and must be further evaluated. Skip to question 37 for another quantitative method.

Other Quantitative Methods (¶62):

The University may use a quantitative method to evaluate effectiveness not specifically identified in Statement No. 53 if the method meets all of the following criteria:

37a. Through identification and analysis of critical terms, does the method demonstrates that the changes in cash flows or fair values of the potential hedging derivative instrument substantially offset the changes in cash flows or fair values of the hedgeable item?	N/A	N/A
37b. Can replicable evaluations of effectiveness be generated that are sufficiently complete and documented such that different evaluators using the same method and assumptions would reach substantially similar results?	N/A	N/A
37c. Have the substantive characteristics of the hedgeable item and the potential hedging derivative instrument that could affect their cash flows or fair values been considered?	N/A	N/A

If "yes" to all of questions 37 a-c, another quantitative method may be used to demonstrate effectiveness.

If "no" to any of questions 37 a-c, another quantitative method may not be used to demonstrate effectiveness.

STATE OF CALIFORNIA DGS Natural Gas Services Program

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Amendment for the Authorization of Special Purchases

This Amendment for the Authorization of Special Purchases, (hereinafter referred to as "Amendment") is entered into between the State of California, acting by and through the Department of General Services, (hereinafter called "DGS"), and the {<u>name of Participant as in GSA</u>} (hereinafter called "Participant").

This Amendment is to the Gas Service Agreement (hereinafter "GSA"), which has previously been executed by and between, the DGS and the Participant.

WHEREAS, the Participant has a commitment to buy its natural gas supplies from the DGS as specified in the GSA; and

WHEREAS, the Participant desires to make "Special Purchase(s)" (hereinafter "SP") of specified quantities of natural gas at prices designated by the Participant for the sole benefit and use of the Participant, which requires modifications to the terms of the GSA between the parties; and

WHEREAS, the DGS buys natural gas in a dynamic commodity market which requires immediate acceptance of proposed prices and terms; and

WHEREAS, the parties desire to amend the terms of the GSA so that the Participant can request that the DGS make such SP(s) for the Participant;

NOW THEREFORE, in consideration of the mutual promises, covenants, conditions as hereinafter set forth and as set forth in the GSA, the parties agree as follows:

- 1. The Participant's agreement with the terms of this Amendment is a condition for the Participant to direct the DGS to make SP(s) of natural gas for the Participant with the price, term, and other conditions specified by the Participant.
- 2. The DGS will discuss and, when and where possible, make such purchases for the Participant, based on prior agreement of purchase details and market availability. This prior agreement shall be memorialized by an "SP Authorization" (as defined in section 3.8 3.10 hereof).
- 3. In signing this Amendment, the Participant acknowledges, understands, and accepts all the following as prerequisites for the DGS executing any SP of natural gas for the Participant:
 - 3.1 The ability of the DGS to execute any requested SP depends on market conditions and, even if requested by the Participant, there can be no assurance

that the DGS can effect any requested SP from the market in which the DGS operates.

- 3.2 The DGS does not endorse or recommend that the Participant make any particular SP and the decision to make such purchase(s) is made solely by the Participant, based on only the Participant's own understanding of the risks and benefits of such purchases.
- 3.3 The DGS will only make an SP if the DGS believes that the Participant actually needs and will use the volume of natural gas requested in the SP and if the Participant has not already made a prior commitment to the DGS to purchase that volume of natural gas. The DGS will not make gas purchases it believes are for speculative purposes, purchasing only the natural gas necessary for the Participant's operational requirements.
- 3.4 Any SP made for the Participant is on a "take or pay" basis. "**Take or pay**" basis means that the Participant is obligated to pay for the natural gas purchased, even if the Participant does not need or cannot use that volume of natural gas.
- 3.5 If the Participant cannot use all of the natural gas purchased in any SP, DGS will sell that excess gas, if there is a need for it, to the other DGS NGS Program Participants, at the otherwise applicable Index Rate for the month. If the excess gas is not needed by the other Participants, DGS will endeavor to sell such volumes to its gas vendor or to the open market at available market rates. Participant shall receive credit for the sums received by DGS NGS from such transfers. Participant shall remain obligated for the full cost of any SP Volumes at the SP prices. Participant recognizes and acknowledges that the ability to sell all of any excess gas volumes and the prices received for such gas are highly dependent on the then current market conditions and other factors which are all outside of the DGS's control.
- 3.6 Any natural gas purchased in an SP will be considered the first natural gas used by the Participant each month and that any other natural gas supplied by the DGS under the GSA will flow only after all SP natural gas for the time period has been taken and considered used.
- 3.7 Because of the nature of the natural gas markets, the commitment to an SP is irrevocable once DGS receives and accepts an SP Authorization. Participant specifically acknowledges that an SP Authorization for an SP is a final and irrevocable commitment of the Participant to make the purchase requested and that once effected shall be deemed to be an amendment to the GSA.
- 3.8 An "SP Authorization" is:
 - A. the written or electronic instruction from the Participant to the DGS to make an SP for the Participant;

- B. in a form and with all the necessary information that is required by the DGS, including the designation of the volumes of natural gas, specified by the time periods to be delivered, the points of delivery, the "trigger price", and any other necessary information; and
- C. made for the Participant by individuals specifically identified by the Participant as authorized to make such commitments for the Participant (see section 4 and Exhibit 1 herein).
- 3.9 The form of price specification will be of a "trigger price", that is, the maximum price(s) at which, when all other terms and conditions are met, the Participant desires that the DGS make the purchase(s). The DGS may automatically execute such an SP purchase, without any further communication or authorization from the Participant, when the DGS is able during its normal hours of operation to obtain the specified trigger price or some lower price on the natural gas markets.
- 3.10 An SP may be revoked or modified only if the DGS is notified prior to its execution of the SP and the DGS, in its sole determination, has sufficient time to withdraw the purchase order from the market and has been able to do so.

4. An SP Authorization can only be made for the Participant by individuals specifically identified by the Participant as authorized to make such commitments for the Participant. The actions of such individuals in submitting an SP Authorization shall be binding on the Participant. Exhibit 1 of this Amendment provides the name(s) of the individuals who are authorized by the Participant to make SP Authorizations to the DGS for any SP(s) for the Participant. Individuals will remain authorized until that authorization is specifically revoked by the Participant.

5. Changes to the individuals authorized to make SP Authorizations for the Participant shall be made in writing to the DGS in the manner specified in the GSA for notification. Such changes must be signed by an employee of the Participant authorized to sign the GSA or amendments to that document.

6. Each of the following individuals must receive a copy of the SP Authorization. Transmittal of an SP Authorization can be made electronically if it includes an explicit statement from a duly authorized representative that the Participant is transmitting an SP Authorization with the intention to bind the Participant to the proposed purchase.

Marshall D. Clark Manager, DGS Natural Gas Services Phone: (916) 375-5990 E-Mail: <u>Marshall.Clark@dgs.ca.gov</u>

DGS Gas Advisor (as designated by NGS Manager) Nancy Moon Phone: (248) 620-5223

MoonScreen@aol.com

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7. Changes to the named individuals in either Exhibit 1 or Section 6 shall be done as notice items as specified in Section 9.11 Notices of the GSA.

8. After the DGS has transacted the requested SP, the DGS will complete the following documentation:

Within one working day of the execution of the SP, the DGS will send an e-mail or other written confirmation to the Participant setting forth the details of the completed SP.

Upon receipt of the executed transaction confirmation from the gas supplier confirming the SP, the DGS will prepare an SP Amendment to the GSA document and send to the Participant. Participant is to acknowledge within five working days by countersignature the SP Amendment and return one copy to the DGS. The acknowledgement is only for record purposes and does not change the obligation already incurred by the Participant with the SP Authorization.

Except as noted herein, all other terms and conditions of the Gas Services Agreement not in conflict with this Amendment shall remain in full force and effect.

IN WITNESS WHEREOF, the Participant and DGS have caused this Amendment to be executed by their duly authorized representatives on the date entered.

Department of General Services:	{Participant}:	
Ву:	By:	70
Date:	Date:	_
Name: Kimberly Hunt	Print Name:	_
Title: Chief, DGS Office of Risk & Insurance Management	Title:	-

Exhibit 1, SP Authorization Amendment

Amendment for the Authorization of Special Purchases

Date of Delegation of SP Authorization authority:	
Approved for Participant by (name):	
Title:	
Participant designates the following individual(s) as authorized to make binding SP Authorizations for the Participant, as described in section 4 of this Amendment. Th designation will remain in effect until modified by the Participant by the process as described in sections 5 and 7 of this Amendment. The Participant must notify the D writing if an authorization is modified or ended.	
Name:	
Title:	
Phone Number:	
E-Mail Address:	
Fax Number:	

[Additional names may be added if Participant wants more than one individual to have the authority to make SP Authorizations in its name.]



STATE OF CALIFORNIA DGS Natural Gas Services Program Special Purchase Amendment #21 to Gas Service Agreement

This Amendment to the existing Gas Services Agreement, hereinafter called "Amendment" is entered into between the State of California, acting by and through the Department of General Services, (hereinafter called "DGS") and the UNIVERSITY OF CALIFORNIA, SAN FRANCISCO, (hereinafter called "Participant"), is effective immediately.

Whereas, the Participant has requested DGS make a special purchase of gas for the Participant which will call for the delivery of specified quantities of gas that require modifications to the Gas Service Agreement between the parties; and,

Whereas, it is the desire of the parties to amend the terms of the Gas Service Agreement to permit DGS to make this special purchase of gas for Participant.

NOW THEREFORE, in consideration of the mutual promises, covenants, and conditions as hereinafter set forth and as set forth in the Gas Services Agreement, terms of which are not modified hereunder except as set forth below, the parties agree as follows:

Special Purchase Transaction:

On April 30, 2009, at the request of the Participant, DGS purchased natural gas for delivery as set forth on page 2, Special Purchase Detail for delivery at the Malin delivery point. The Participant agrees to take and pay for such quantities at the prices indicated in the delivery detail on page 2 (plus applicable transport and other costs for delivery from the Malin delivery point to the Participant's Facility.) Gas delivered under this Special Purchase shall be deemed delivered after any gas from any existing special purchase agreements and before any other Requirements gas is provided. (TC-2011-025r SP dated April 30, 2009, & TC 2006-026r SP dated April 30, 2009)

Other Conditions: All other terms and conditions of the Gas Service Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the Participant and DGS have caused this Agreement to be executed by their duty authorized representatives on the date entered.

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Department of General Services By: Date:

Name: Kimberly Hunt

Title: Chief, DGS, Office of Risk and Insurance Management

Customer Name Bv:

Date: 12

Name: H

Title:

Special Purchase Detail

THE UNIVERSITY OF CALIFORNIA, SAN FRANCISCO Special Purchase Amendment # 21

TC 2011 025r SP, dated April 30, 2009

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Date	MMBtu/month	No. of Months	Malin Price/MMBtu		Total Dollars	
7/1/11 - 6/30/12	10,000	12	\$	6.2000	\$	744,000.00

TC 2011 026r SP, dated April 30, 2009

Date	MMBtu/month	No. of Months	Malin Price/MMBtu		Total Dollars	
7/1/11 - 6/30/13	10,000	24	\$	6.4000	\$	1,536,000.00