



BROWNSVILLE PUBLIC UTILITIES BOARD

Gas Hedging and Power Supply Strategy Update

January 13, 2023 Finance Committee Open Session

Overview



- Gas Hedging Update
- Power Supply Strategy Update
- Q&A

Gas Hedging Update



- Staff continues to execute the tasks outlined in the prior Finance Committee and Board briefings.
- Near-term focus:
 - Updating BPUB Investment Policy
 - Establishing an ISDA agreement
 - All requested documents have been provided to Shell. We are awaiting the proposed ISDA from them.
 - Updating calculations and refreshing pilot program parameters
- We currently anticipate executing a pilot program transaction in January for February delivery.
 - However, this may shift to February depending on the time required to negotiate the ISDA.
- Assuming the pilot program transaction behaves as expected, we anticipate requesting approval for ongoing gas hedging program implementation at the May Board meeting.

Gas Hedging Update



Illustrative pilot program parameters:

Parameter	Value	Pricing as of 12/28/22
Range of underlying FPE costs at 90% confidence (assumes 40% annualized power price volatility and 30% gas price volatility)	\$5.27 million to \$6.50 million	Note small size of
Anticipated pilot program hedge quantity	1,200 MMBtu/day	pilot transaction
Current forward price (Feb)	\$4.27/MMBtu	compared to underlying FPE
Potential hedge price (assumes 5% markup)	\$4.48/MMBtu	cost range.
Notional hedge value	\$150,528	K
Potential hedge settlement range at 90% confidence (assumes 30% annualized gas price volatility)	-\$48,009 to +\$30,490	

- Potential settlements for the pilot transaction are expected to move in the opposite direction of underlying fuel and purchase power costs, thereby helping to stabilize them.
- Because of small size of pilot, impact is expected to be small.

Forward Gas Prices Have Fallen



- The sample pricing on prior slide was as of 12/28/22.
- Prices have fallen since our November 7th presentation on this topic.
- Assuming this trend continues, BPUB fuel and purchase energy costs should decline.
- This should also create an opportunity to lock-in a portion of our natural gas costs at better pricing than previously assumed.

Forward Gas Prices Have Fallen





Anticipated Timeline



	Qtr 4, 2022			Qtr 1, 2023			Qtr 2, 2023		
Task Name	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
₄ Gas Hedging Timeline		1							
Establish 1st ISDA									
Update Investment Policy									
Conduct analysis and set quantities for pilot program									
Execute pilot transaction		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		1.1					
Pilot deliveries occur		- - - - -				1			
Assess pilot transaction results		- - - - -					1		
Present pilot transaction results to FC and Board		- - - - -					•		
Request approval for ongoing program implementation								∲ 5/ 8	В

Power Supply Strategy Update



- Staff is executing the steps proposed in the prior Finance Committee and Board briefings.
- We are holding a series of workshops to facilitate staff's development of a draft power supply strategy.
 - Goal is to identify potential approaches to reduce total power supply costs (\$/KWhr) and risk.

Workshop Date	Focus
November 16, 2022	Clarify understanding of capacity position and resource options
December 15, 2022	Discuss and develop initial short list of resource strategies
January 12, 2023	Discuss results of initial analysis of short list
Early February 2023	Identify preferred strategy

- Current efforts are focused on refining the analyses presented at the January 12 workshop.
 - The leading preliminary strategy continues to be adding dual-fueled reciprocating engines at Silas Ray in small increments.

Power Supply Strategy Timeline



			1st Quarter			2nd Quarter		
Task Name	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
BPUB Power Supply Strategy							-	
Workshop 1: Identify Key Issues	•	11/16						
Work on issues/questions raised	•							
Update models		h						
Workshop 2: Define short-list of strategies & resources		₹1	2/15					
Analyze strategies & options		+	Ъ					
Workshop 3: Discuss analysis results and identify preferences			1	/12				
Refine and finalize draft strategy			+					
Present draft strategy to board as information item (Tent.)					3	/13		
Conduct Board workshops (TBD)					÷			

Questions & Answers



Discussion