Current Assumptions for Royalty Relief Evaluations Effective March 1, 2016

Introduction –Applicants for deepwater royalty relief for leases sold prior to late 1995 use a cash-flow model called RSVP. Until May 1, 1999, the economic parameters for this model were published by the Gulf of Mexico Region of BOEMRE (formerly MMS) in the form of a Notice to Lessees (NTL). However, NTL 99-G06 (May 1, 1999) established a regular quarterly schedule to address necessary changes to these prices and to publish updates over the internet, without issuing a new NTL. The planned quarterly schedule for updating is around February 1, May 1, August 1, and November 1.

How to use this update of economic parameters —You should first download or obtain the version of RSVP named in the table below. The model as you receive it will contain price inputs that may be out-of-date. It is your responsibility to inspect the model's "Viability Module, Oil Price Inputs and Gas Price Inputs" and to revise cell entries, including associated Crystal Ball input windows, replacing out-of-date values by the updated values.

Overview of this update – For this update, the starting prices are set for 2016.

Prices — The most-likely oil and gas prices are based on the Energy Information Agency (EIA) *Short Term Energy Outlook* (STEO), the high and low price ranges of prices in recent *Annual Energy Outlook* (AEO) issues, the World Bank Commodities Price Forecast, and the Office of Management and Budget (OMB) Budget Cases.

API gravity adjustments to oil price – The table in RSVP addressing API Gravity and Price Adjustments should consist of the following parameters:

API Gravity	Price Adjustment		
65	-\$2.43		
45	\$0.57		
41	\$0.57		
35	\$0.45		
32	\$0.00		
0	-\$4.80		

Updated table of parameters -- The entire table of parameters including the updates is:

Parameter	Minimum	Most Likely	Maximum
Starting Oil Price			
Gulf of Mexico Landed	\$36.42	\$44.27	\$51.35
('15 \$/bbl RAC)			
Starting Gas Price			
Gulf of Mexico Landed	\$2.05	\$2.56	\$3.10
('15 \$/Mcf)			
Version of RSVP	2.14		
Base Year	2016		
Real Oil Price Growth Rate 1	5.60%	6.14%	6.75%
Years to 2 nd Oil Scenario	2 nd rates are first applied to infer 2020 price from 2019		
Real Oil Price Growth Rate 2	2.56%	3.65%	4.79%
Years to 3 rd Oil Scenario	3 rd rates are first applied to infer 2026 price from 2025		
Real Oil Price Growth Rate 3	0.78%	2.58%	3.47%
Real Gas Price Growth Rate 1	6.82%	7.72%	8.31%
Years to 2 nd Gas Scenario	2 nd rates are first applied to infer 2020 price from 2019		
Real Gas Price Growth Rate 2	2.41%	3.79%	4.88%
Years to 3 rd Gas Scenario	3 rd rates are first applied to infer 2026 price from 2025		
Real Gas Price Growth Rate 3	0.67%	2.57%	3.52%
Federal Income Tax Rate	NA	35.00%	NA
Base Year for Discounted Cash Flow	Application Date Year		
Discount Range	10%		15%
Random Number Seed		104	
Overhead Cost Allowance		5%	

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