

**STAFF REPORT  
INFORMATIONAL  
77**

A	72, 74	08/23/19 PRC 91 PRC 163 PRC 425 PRC 426 PRC E-392 J. Abedi J. Fabel
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**STATUS UPDATE ON THE TERMS OF THE AGREEMENT AMENDING  
STATE OIL AND GAS LEASE NOS. PRC 91, PRC 163, PRC 425, PRC 426,  
AND PRC E-392, TO REDUCE IDLE WELL COUNTS, CREATE A SINKING FUND,  
AND MODIFY THE PRICE-BASED SLIDING SCALE ROYALTY**

**LESSEE:**

SoCal Holding, LLC

**AREA, LAND TYPE, AND LOCATION:**

State Oil and Gas Lease Nos. PRC 91 (589 acres), PRC 163 (640 acres), PRC 425 (835 acres), PRC 426 (640 acres), and PRC E-392 (835 acres) (collectively “Leases”), are located both in the onshore and offshore area of the Huntington Beach Oil Field in Orange County.

**INTRODUCTION:**

On October 19, 2017, the Commission authorized amending the Leases held by SoCal Holding, LLC, a subsidiary of California Resources Corporation (CRC) ([Item 93, October 19, 2017](#)).<sup>1</sup> The amendment involved adjusting the existing sliding scale royalty to provide relief from historic volatility in the oil market in exchange for a comprehensive program of liability reduction for the State, including commitments by CRC to abandon wells, analyze abandonment liability costs, and establish a sinking fund to cover future end-of-field decommissioning activities. The Commission directed staff to report, within 2 years, on the “terms of the agreement, the progress being made on the well abandonment, and the effects on royalties under the proposal.” Additionally, staff was directed to report on how CRC’s well abandonment commitments under the amendment might supplant the California Department of Conservation’s Division of Oil, Gas, and Geothermal Resources (DOGGR) regulations regarding idle well abandonment. As directed, this informational staff report has been prepared to update the

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<sup>1</sup> Although SoCal Holding, LLC, is the lessee, for clarity, CRC is used to reference both parties.

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Commission on the outcomes to date and status of the amendment implementation.

### **BACKGROUND:**

The Leases were originally issued between 1938 and 1950 and have been assigned numerous times over the years. The current Lessee of record is SoCal Holding, LLC, which operates as a wholly owned subsidiary of CRC. The Leases encompass approximately 285 total active and inactive (i.e., idle) wells. Forty-one wells are drilled from Platform Emmy, located offshore within PRC 425, and 244 wells are drilled from onshore sites on CRC's properties in Huntington Beach into the offshore leases. Since 1995, royalties paid to the State on production have been based on a sliding scale with a maximum royalty of 25 percent, based on the price of oil.

On April 5, 2016, at CRC's request, the Commission approved a temporary royalty modification for the Leases ([Item 65, April 5, 2016](#)).<sup>2</sup> In 2016, oil prices were averaging around \$38 per barrel (BBL), and CRC contended that its cash flow had become negative as a result of the royalty rate structure and low oil prices. This circumstance endangered CRC's ability to economically produce from the Huntington Beach Oil Field and had potential to cause its premature abandonment. The Commission approved a 2-year temporary royalty modification, which adjusted the sliding scale royalty to better reflect observed market trends. The parties intended to use the 2-year period to negotiate a permanent royalty modification that considered the full range of possible fluctuations in the oil market.

Between April 2016 and October 2017, the Commission was unexpectedly forced to undertake the abandonment and decommissioning of facilities on State lands held by other Lessees, Rincon Island Limited Partnership and Venoco, Inc., after those companies became insolvent. These circumstances refocused staff's attention to reducing the State's decommissioning liability if other lessees became unable to plug and abandon infrastructure on State leases. With this goal in mind, staff negotiated with CRC for a long-term royalty modification in exchange for a commitment to reduce idle well counts and create a sinking fund to cover well abandonment liabilities.

In October 2017, the Commission approved an amendment to CRC's Huntington Beach leases modifying CRC's royalty rate in exchange for near-term, verifiable actions to reduce the State's liability and to actively plan for end-of-field life scenarios ([Item 93, October 19, 2017](#)) (the amendment). The modified sliding

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<sup>2</sup> Public Resources Code section 6827.2 provides the Commission with the authority to renegotiate an oil and gas lease to prevent premature abandonment if continued production is economically unfeasible under the terms of the lease and continuation is in the best interests of the people of California.

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scale royalty increased the minimum royalty rate from 4 percent to 16 2/3 percent when the realized price of oil is at or below \$50/BBL and increased linearly until it reaches a cap of 25 percent at and above \$80/BBL. The agreement also focused on a systematic effort to reduce the number of idle wells on the Leases while increasing the reserved funding held to cover future abandonment costs at the end of the field's life. CRC agreed to:

- Plug and abandon all 15 idle wells on Platform Emmy within 5 years
- Obtain an independent evaluation of costs to abandon and decommission Platform Emmy and CRC's onshore wells
- Commit to either a sinking fund or funding well abandonment activities at a minimal rate of \$3 million per year
- Commence a program to plug idle wells located onshore at a rate of 10 wells per year
- Repay the State the royalty deferred between April 2016, and the effective date of the amendment, with interest, and
- Grant a lien to the State over CRC's private uplands in order to make the State a secured creditor in the event of a bankruptcy

### **DISCUSSION:**

Since the amendment became effective in October 2017, CRC and staff have worked collaboratively to share information to ensure lease compliance and to track liability reduction efforts by CRC. A joint abandonment committee of Commission and CRC staff formed in late 2017 and meets biannually. As of August 23, 2019, CRC is fully compliant with the terms of the Leases and their amendments. CRC's remaining obligations under the amendment will start to come due over the next 2 to 3 years. A list of the obligations completed to date is attached to this staff report as Exhibit C. Below is a summary of compliance with the primary terms of the October 2017 amendment and a discussion of the amendment's impact on State royalties and compliance with DOGGR's Idle Well Management Plan's requirements.

#### A. Summary of Compliance with the Primary Terms of the Amendment.

##### 1. **Plug and abandon idle wells on Platform Emmy, with all 15 idle wells plugged within 5 years.**

As a part of the amendment, CRC pledged to plug the 15 idle wells existing on Platform Emmy within 5 years. Four wells were to be plugged in the first year after the amendment went into effect with an additional four wells abandoned no later than September 30, 2019. Between October 1, 2017, and September 30, 2018, CRC plugged and abandoned the first

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four idle platform wells (wells 425-J338; 425-354; 425-A304; and, 426-475). Between October 1, 2018, and July 31, 2019, CRC plugged and abandoned four additional idle wells (wells 392-UJ201, 425-UJ322B, 425-J340, and 425-J345). Plugging these eight wells reduced the overall abandonment liability on the platform by approximately \$2.9 million (i.e., the actual costs CRC expended). CRC must abandon the remaining idle wells by September 30, 2022.

2. **Plug and abandon idle wells located onshore that produce from the Leases.**

By October 1, 2019, CRC must develop a plan to plug and abandon a majority of the 146 idle wells that are located onshore and produced from the leases. By January 1, 2021, CRC must start the process of plugging no less than 10 idle wells per year until the number of idle wells reaches less than 15 percent of the total well count on the Leases. Under the amendment CRC will have to increase its contributions to a sinking fund if it fails to meet the 10 well per year quota.

3. **Obtain an independent evaluation of costs to abandon and decommission Platform Emmy.**

In late 2018, CRC hired a third-party consultant, InterAct PMTI, to develop engineering cost estimates for the future plugging and abandonment of the 45 Platform Emmy wells and the costs to decommission Platform Emmy itself (four Emmy wells were abandoned after the cost estimates were submitted). These estimates are shown below in present dollars. This estimate will be revised again in 2022 and every 3 years thereafter. Currently, Commission staff is analyzing the consultant's report.

<b>Platform Emmy Decommissioning Cost Estimates</b> (in present dollars)	
Plug and Abandon 45 Wells	\$10.9 million
Platform Decommissioning	\$22.8 million
<b>TOTAL</b>	<b>\$33.7 million</b>

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4. **Obtain an independent evaluation of costs to abandon lease wells producing from onshore.**

By October 1, 2019, CRC is obligated to hire a consultant to develop cost estimates to plug and abandon all 244 wells that are located onshore pursuant to the leases. The methodology for developing this estimate is detailed in the amendment and is similar to that used to develop the cost estimates for the plugging and abandonment of the Platform Emmy wells.

5. **Commit to either a sinking fund or funding well abandonment activities at a minimal rate of \$3 million per year, commencing in 2019.**

Starting in October 2019, CRC will commit to spending \$3 million each calendar year (prorated for 2019) toward abandoning idle wells. In years where less than \$3 million is spent on such activities, the difference will be paid into a sinking fund, held in escrow, to fund future abandonment obligations. The \$3 million value will increase at an annualized compound rate of 3 percent.

6. **Repay the State the royalty deferred between April 2016, and September 30, 2017, with interest.**

By March 31, 2021, CRC will pay the State the royalty deferred between April 2016 and September 2017, with interest. The current value is approximately \$1.8 million.

7. **Grant a lien to the State over CRC's private uplands in order to give the State secured creditor status in the event of a bankruptcy.**

In late 2017, CRC granted the Commission a second priority secured lien on its fee-owned Huntington Beach drill-site properties. This lien is collateral for CRC's abandonment obligations and provides the Commission status as a secured creditor in the event CRC were ever to declare bankruptcy.

B. The Amendment's Impact on Royalties Received by the Commission.

The amendment adjusted the sliding scale royalty so that the maximum 25 percent royalty only applies when the price of oil is at \$80/BBL. Although oil prices significantly declined from the historic highs of 2011-2014, oil prices did recover from a slump soon after approval of the amendment. Since October 2017, royalty rates have varied between 17.6 and 23 percent. Both at the April 5,

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2016 Commission meeting and during subsequent meetings with staff, CRC indicated that the royalty modification adopted in the amendments would allow CRC to reinvest in the Huntington Beach field and maintain economic feasibility. Since March 2018, 15 onshore wells have been developed which now produce an additional 1,700 barrels of oil per day from the Leases.

Staff's economic analysis shows that, even at the lower royalty rates, the increased production between October 2017 and June 2019 provided the State with a net increase of approximately \$2.6 million more in actual royalty dollars than the State would have received at the maximum royalty rate from pre-development production wells (base production). This is because the State's royalties from the new production alone (\$7.4 million gain) offset the reduced royalty realized on production from wells that existed at the time of the amendment (\$4.8 million reduction). The effects on royalties under this scenario is attached as Exhibit A with a graph as Exhibit B.

### C. The Amendment's Impact on CRC's Obligations to Abandon Idle Wells Pursuant to DOGGR Idle Well Program Management Requirements.

A concern expressed by the Commission in considering the amendment was whether CRC's idle well abandonment obligations under the amendment would displace future DOGGR requirements to abandon idle wells operated by CRC. CRC has abandoned eight idle wells on Platform Emmy since the amendment went into effect.

In January 2018, DOGGR rules on idle well management became effective (Pub. Resources Code, § 3206). The rules mandate two compliance options for operators of idle wells. An operator can either abandon or reactivate a defined percentage of idle wells annually and submit an idle well management plan or pay idle well fees. For Huntington Beach and fields under the same parent company, CRC elected to pay idle well fees along with the continuation of an active idle well testing program. The idle well fees for operations on the State leases were approximately \$140,000 for both 2018 and 2019. Those fees go to the Hazardous Idle and Deserted Well Abandonment Fund to support the plugging and abandonment operations by DOGGR. Therefore, no well abandonments were required in Huntington Beach pursuant to DOGGR idle-well requirements for 2018 and 2019, nor will CRC accrue future idle well abandonment obligations under DOGGR's requirements if CRC continues to pay the idle well fees and maintain its inspection program.

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**CONCLUSION:**

Since the Commission approved the amendment in October 2017 Commission and CRC staff have worked collaboratively to share information to ensure lease compliance and to identify liability reduction efforts by CRC. As of August 23, 2019, CRC is fully compliant with the terms of the Leases and their amendments. CRC's remaining obligations under the amendment will start to come due over the next 2 to 3 years. But so far, eight idle wells have been abandoned on Platform Emmy, a lien has been granted to the Commission on CRC's Huntington Beach properties, and evaluations have been developed on the cost to decommission lease assets. By applying certain assumptions, economic analysis suggests that the State's royalties have increased by approximately \$2.6 million between October 2017 and June 2019 due to field development. Finally, DOGGR's idle well management requirements allow CRC to pay fees and carry out an inspection program in lieu of abandoning idle wells. Because CRC has opted to pay the fee, the amendment's idle well abandonment obligations do not interfere or offset CRC's obligations to DOGGR.

**EXHIBITS:**

- A. Commission's Royalty Tracking Worksheet
- B. Monthly Net State Benefit
- C. Status Update of Terms

**EXHIBIT A**  
**Commission's Royalty Tracking Worksheet**

PRC 91  
PRC 163  
PRC 425  
PRC 426  
PRC E-392

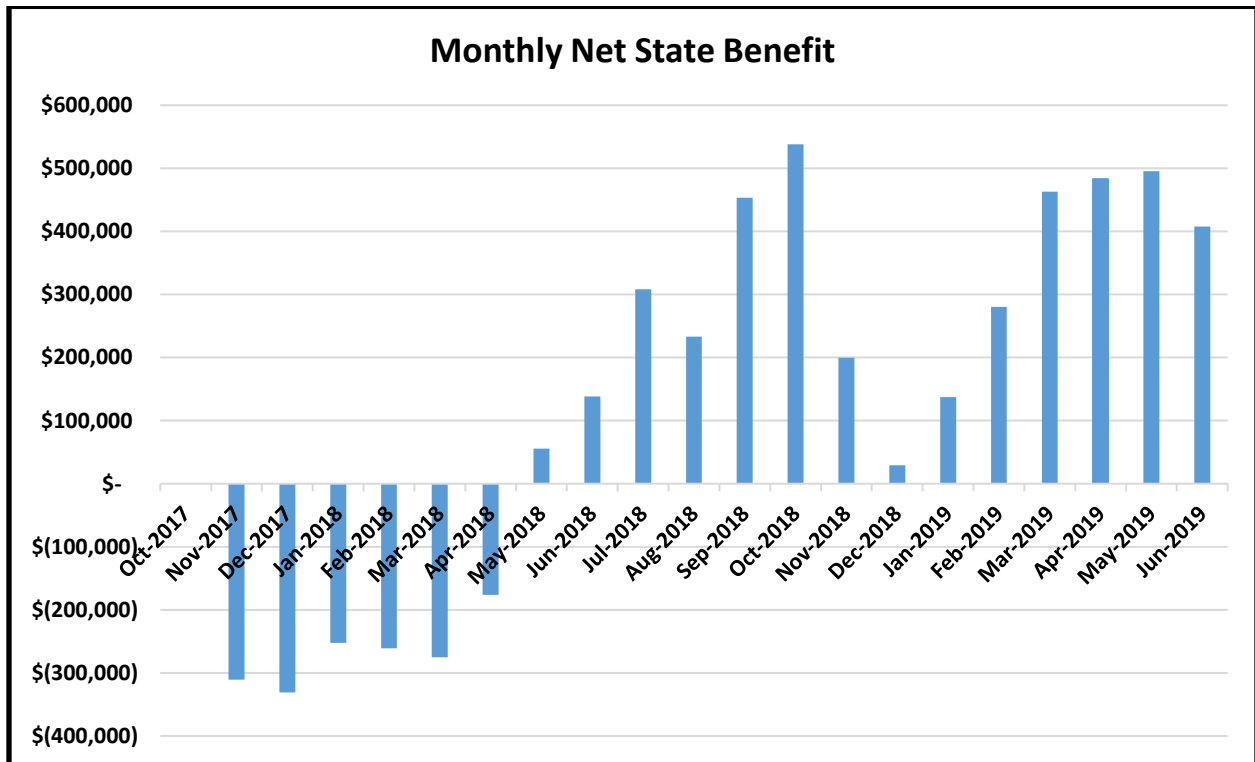
Production Month	Oil Price (\$/B)	Old Royalty Rate	New Royalty Rate	\$ Amount paid to SLC (\$)	Total Offshore Prod (BOPD)	Drilling Wedge Prod (BOPD)	Wedge Royalty (\$)	Base Prod (BOPD)	Base Production at New Royalty Rate (\$)	Base Production at Old Royalty Rate (\$)	Delta Royalty Reduction (\$)	Net Royalty Increase (\$)
Oct-2017	53.87	25.00%	25.00%	1,419,614	3,400	-	\$ -	3,400	\$ 1,419,614	\$ 1,419,614	\$ -	\$ -
Nov-2017	60.06	25.00%	19.48%	1,097,160	3,125	-	\$ -	3,125	\$ 1,097,160	\$ 1,407,756	\$ (310,596)	\$ (310,596)
Dec-2017	61.50	25.00%	19.88%	1,286,210	3,394	-	\$ -	3,394	\$ 1,286,210	\$ 1,617,411	\$ (331,200)	\$ (331,200)
Jan-2018	66.76	25.00%	21.34%	1,470,503	3,330	-	\$ -	3,330	\$ 1,470,503	\$ 1,722,887	\$ (252,384)	\$ (252,384)
Feb-2018	64.37	25.00%	20.66%	1,242,187	3,336	-	\$ -	3,336	\$ 1,242,187	\$ 1,503,276	\$ (261,089)	\$ (261,089)
Mar-2018	64.52	25.00%	20.72%	1,374,169	3,317	18	\$ 7,308	3,299	\$ 1,366,861	\$ 1,649,491	\$ (282,630)	\$ (275,322)
Apr-2018	68.32	25.00%	21.75%	1,539,452	3,453	104	\$ 46,470	3,349	\$ 1,492,982	\$ 1,715,889	\$ (222,908)	\$ (176,438)
May-2018	73.42	25.00%	23.04%	1,958,505	3,735	391	\$ 205,113	3,344	\$ 1,753,393	\$ 1,902,819	\$ (149,427)	\$ 55,686
Jun-2018	71.46	25.00%	22.62%	1,905,194	3,929	632	\$ 306,270	3,297	\$ 1,598,923	\$ 1,767,110	\$ (168,186)	\$ 138,084
Jul-2018	72.60	25.00%	22.82%	2,122,822	4,134	909	\$ 466,659	3,226	\$ 1,656,163	\$ 1,814,763	\$ (158,600)	\$ 308,059
Aug-2018	69.02	25.00%	21.81%	1,997,605	4,280	982	\$ 458,297	3,298	\$ 1,539,308	\$ 1,764,314	\$ (225,007)	\$ 233,291
Sep-2018	73.49	25.00%	23.07%	2,214,569	4,355	1,160	\$ 589,844	3,195	\$ 1,624,725	\$ 1,761,002	\$ (136,276)	\$ 453,568
Oct-2018	75.84	25.00%	23.72%	2,284,635	4,097	1,125	\$ 627,443	2,972	\$ 1,657,192	\$ 1,746,703	\$ (89,512)	\$ 537,931
Nov-2018	62.58	25.00%	20.06%	1,712,684	4,548	1,324	\$ 498,726	3,224	\$ 1,213,958	\$ 1,512,966	\$ (299,008)	\$ 199,718
Dec-2018	53.36	25.00%	17.61%	1,377,474	4,728	1,467	\$ 427,499	3,261	\$ 949,975	\$ 1,348,436	\$ (398,462)	\$ 29,037
Jan-2019	56.57	25.00%	18.50%	1,489,361	4,591	1,507	\$ 488,954	3,084	\$ 1,000,408	\$ 1,351,885	\$ (351,477)	\$ 137,477
Feb-2019	60.94	25.00%	19.71%	1,549,988	4,609	1,633	\$ 549,088	2,976	\$ 1,000,900	\$ 1,269,489	\$ (268,589)	\$ 280,499
Mar-2019	64.38	25.00%	20.66%	1,983,834	4,811	1,763	\$ 726,803	3,048	\$ 1,257,031	\$ 1,520,958	\$ (263,927)	\$ 462,876
Apr-2019	69.53	25.00%	22.15%	2,212,244	4,787	1,473	\$ 680,749	3,314	\$ 1,531,495	\$ 1,728,293	\$ (196,797)	\$ 483,952
May-2019	67.84	25.00%	21.64%	2,108,929	4,635	1,566	\$ 712,737	3,069	\$ 1,396,192	\$ 1,613,302	\$ (217,110)	\$ 495,627
Jun-2019	63.80	25.00%	20.52%	1,846,299	4,702	1,695	\$ 665,670	3,007	\$ 1,180,628	\$ 1,438,617	\$ (257,989)	\$ 407,681
				36,193,438	75,959	14,488	7,457,631	67,547	\$28,735,807	\$33,576,981	(4,841,174)	2,616,457

Drilling Wedge Prod: production as a result of new development



# EXHIBIT B

PRC 91  
PRC 163  
PRC 425  
PRC 426  
PRC E-392



## EXHIBIT C

### Status Update of Terms

PRC 91  
PRC 163  
PRC 425  
PRC 426  
PRC E-392

<b>By or Before</b>	<b>Activity</b>	
<b>12/5/2017</b>	Abandonment Committee meets	√
<b>1/1/2018</b>	CRC and CSLC execute security agreement for onshore properties	√
<b>5/21/2018</b>	Abandonment Committee meets	√
<b>9/18/2018</b>	Abandonment Committee meets	√
<b>9/30/2018</b>	CRC agrees to plug and abandon initial 4 Emmy idle wells	√
<b>11/28/2018</b>	Abandonment Committee meets	√
<b>12/31/2018</b>	CRC agrees to hire a third-party consultant to calculate the cost to plug and abandon all remaining wells on Platform Emmy and the cost to fully decommission and remove the platform and any remaining offshore facilities ("Emmy Amount")	√
<b>4/25/2019</b>	Abandonment Committee meets	√
<b>9/30/2019</b>	CRC agrees to plug and abandon 4 Emmy idle wells	√