

# **Attachment 3**



HILTON FARNKOPF & HOBSON

## HF&H CONSULTANTS, LLC

*Managing Tomorrow's Resources Today*

201 North Civic Drive, Suite 230  
Walnut Creek, California 94596  
Tel: (925) 977-6950  
Fax: (925) 977-6955  
[hfh-consultants.com](http://hfh-consultants.com)

Robert D. Hilton, CMC  
John W. Farnkopf, PE  
Laith B. Ezzet, CMC  
Richard J. Simonson, CMC  
Marva M. Sheehan, CPA  
Robert C. Hilton, CMC

December 22, 2015

Ms. Trish Rhay  
Assistant Director of Public Works Services  
City of Beverly Hills  
345 Foothill Road  
Beverly Hills, CA 90210

### **Subject: Updated Water Rate Penalty Surcharges**

Dear Ms. Rhay:

On June 30, 2015 the City of Beverly Hills adopted penalty surcharges that were derived with HF&H Consultants' (HF&H's) technical assistance, to be effective October 15, 2015. The penalty surcharges are directly impacted by changes in the City's water rates. The City is proposing revised water rates to be effective in February 2016; therefore, an update to the previously approved penalty surcharge multipliers is necessary. This letter report discusses the relevant background and the derivation of the updated penalty surcharges.

### **Background**

Since April 1, 2015, California has been in a Continuing State of Emergency due to prolonged drought conditions. The Governor issued Executive Order B-29-15, which led the State Water Resources Control Board (SWRCB) to establish conservation standards for water suppliers. For the City, a reduction of 32% is required compared with 2013 customer demands. On May 5, 2015, the City Council declared a Stage D water use reduction of 30% to facilitate compliance with the SWRCB's conservation standard.

In an effort to achieve the SWRCB's directive, the City Council approved Resolution 15-R-13037 declaring a move to Stage D of the City's conservation program. To achieve a 30% cutback in water use, the resolution includes: limits on landscape irrigation; limits on the wash-down of buildings and vehicles; restrictions on filling new swimming pools unless actions accomplishing equivalent water savings are completed on the property (with certain exceptions); bans on draining and refilling of existing pools (with certain exceptions); bans on non-recirculating water fountains; establishes up to a \$1,000 fine for violating such limits and bans.

In addition, the resolution authorizes a penalty surcharge for water use in excess of 70% of each customer's respective baseline demand. The baseline is set at the customer's actual water use from the corresponding billing period during 2013. For example, if a customer's bi-monthly billing cycling is the 60-days ending October 15, 2015, their baseline will be their actual water



use for the 60-days ending October 15, 2013. The penalty surcharges are applied to water use in excess of 70% of the baseline.

The purpose of the penalty surcharge is to generate sufficient revenue to cover additional costs that would likely be borne by the City if the City did not comply with the SWRCB’s cutback target (i.e., “Risk Costs”) in an equitable manner that results in the costs being paid by those who fail to meet the cutback targets. Working with City staff, we identified three categories of costs that could be imposed on the City if water users fail to meet the cutback target established in Stage D, totaling \$6,585,605.

1. **City Conservation Program Costs (“City Costs”).** Initially, if the City fails to meet the SWRCB’s cutback, the SWRCB may require the City of accelerate the current 10-year conservation program that is outlined in the Council-approved Water Enterprise Plan. The conservation program is designed to educate and provide tools to those customers with excessive water use. As such, we recommend the costs associated with the program be covered by those customers who do not meet the cutback goal of 30%.
  
2. **State Water Resources Control Board Fines (“SWRCB Fines”).** The SWRCB can fine water provides a penalty of up to \$10,000 per day for not meeting the cutback target. Understanding customer behavior does not change overnight, we have assumed the City’s overall water cutback percentage may not meet the SWRCB mandated 32% for at least 100 days during FY 2015-16 and could be subject to the \$10,000 per day fine.
  
3. **Metropolitan Water District Tier 2 Costs (“MWD Costs”).** The City purchases its water from MWD. MWD is requiring its customers to reduce water consumption and has provided each customers with an allotment. Water purchased in excess of each customer’s allotment is charged at the Tier 2 rate of \$2,960 per acre foot. If the City fails to cut back their water use, the City will exceed their MWD allotment by 1,291 acre-feet (AF) and incur excess water purchase costs of \$3,821,897. The 1,291 AF is equal to 12% of the City’s 2014 water use of 10,934 AF, meaning if the City could cut back water use by 12%, it would avoid paying the MWD Tier 2 costs.

HF&H and City’s staff developed a penalty surcharge framework which consisted of two levels of penalties assessed on customers who fail to achieve the at least 30% conservation mandated by Stage D of the City’s conservation program. The risk costs were split between the two levels, as shown in Figure 1.

**Figure 1. Summary of Level 1 and Level 2 Risk Costs**

Risk Cost	Level 1	Level 2	Total
City Costs	\$1,763,708		\$1,763,708
SWRCB Fines	\$1,000,000		\$1,000,000
MWD Costs		\$3,821,897	\$3,821,897
<b>TOTAL</b>	<b>\$2,763,708</b>	<b>\$3,821,897</b>	<b>\$6,585,605</b>



Separate base multipliers were derived to appropriately align costs assigned to each level; level 1 includes SWRCB and city costs (conservation, etc.) and level 2 includes MWD costs:

1. **Level 1 Penalty Surcharge.** Customers will pay 1.59 times the base rate for excess usage above 70% of their respective baseline water use during the same period two years earlier.
2. **Level 2 Penalty Surcharge.** Customers will pay an additional 3.08 times the base rate for excess usage above 88% of their respective baseline water use during the same period two years earlier (cumulative 4.67 times).

Those customers achieving a minimum of 30% cutback would pay only the base rate and not be subject to the any Penalty Surcharge. The City Council approved Resolution 15-R-13045 establishing the aforementioned level 1 and 2 penalty surcharges as a provision of the Stage D conservation program.

Figures 2 and 3 summarize the derivation of the original Level 1 and Level 2 Penalty Surcharge multipliers, effective October 2015.

**Figure 2. Derivation of Level 1 Penalty Surcharge Multiplier - October 2015**  
 (charged on water use exceeding 70% of a customer's baseline\*)

Customer Class	Estimated Use Subject to Penalty	Current Base Rates	Revenue at Base Rate
<b>Beverly Hills Residential (single- and multi-family)</b>			
Tier 1**	n/a		n/a
Tier 2	79,981 hcf	\$4.67	\$373,513
Tier 3	130,341 hcf	\$7.36	\$959,310
Tier 4	154,097 hcf	\$14.22	\$2,191,259
Beverly Hills Commercial	107,214 hcf	\$6.04	\$647,570
<b>West Hollywood Residential (single- and multi-family)</b>			
Tier 1**	n/a		n/a
Tier 2	23,306 hcf	\$5.84	\$136,109
Tier 3	11,217 hcf	\$9.21	\$103,306
Tier 4	4,105 hcf	\$17.77	\$72,946
West Hollywood Commercial	21,639 hcf	\$7.55	\$163,375
	531,900 hcf		\$4,647,388 <b>a</b>
		City Costs	\$1,763,708
		SWCRB Fines	\$1,000,000
		<b>Total Level 1 Risk Costs</b>	<b>\$2,763,708 <b>b</b></b>
		<b>Level 1 Penalty Surcharge Base Rate Multiplier</b>	<b>0.59 <b>b/a</b></b>

\* Baselines are actual water use from the corresponding billing period in 2013

\*\* In accordance with Stage D, Tier 1 residential customers are not subject to the penalty surcharge



**Figure 3. Derivation of Level 2 Penalty Surcharge Multiplier – October 2015**  
 (charged on water use exceeding 88% of a customer’s baseline\*)

Customer Class	Estimated Use Subject to Penalty	Current Base Rate	Revenue at Base Rate
<b>Beverly Hills Residential</b>			
Tier 1*	n/a		n/a
Tier 2	21,328 hcf	\$4.67	\$99,604
Tier 3	34,758 hcf	\$7.36	\$255,816
Tier 4	41,093 hcf	\$14.22	\$584,336
Beverly Hills Commercial	28,590 hcf	\$6.04	\$172,685
<b>West Hollywood Residential</b>			
Tier 1*	n/a		n/a
Tier 2	6,215 hcf	\$5.84	\$36,296
Tier 3	2,991 hcf	\$9.21	\$27,548
Tier 4	1,095 hcf	\$17.77	\$19,452
West Hollywood Commercial	5,770 hcf	\$7.55	\$43,567
	141,840 hcf		\$1,239,303 <b>a</b>
	<b>Level 2 Risk Costs (MWD Costs)</b>		<b>\$3,821,897 <b>b</b></b>
	<b>Level 2 Penalty Surcharge Base Rate Multiplier</b>		<b>3.08 <b>b/a</b></b>

\* Baselines are actual water use from the corresponding billing period in 2013

\*\* In accordance with Stage D, Tier 1 residential customers are not subject to the penalty surcharge

### Derivation of Revised Penalty Surcharge Multipliers

Subsequently, the City contracted with HF&H to evaluate and update the City’s base rates to reflect changes in costs and to fairly apportion those costs among customer classes and the tiers within each class. The results of that review have been documented in our December 21, 2015 report and are being presented to the City Council at the January 5, 2016 meeting.

As a result of the proposed changes to the City’s base water rates the Level 1 and Level 2 Penalty Surcharge Multipliers must be revised accordingly or the City may generate Penalty Surcharge revenue in excess of the potential costs that would likely be borne by the City if the City did not comply with the State’s water use reduction target. As the base rates increase the multipliers decrease to net the same projected revenue.

To revise the Penalty Surcharge Multipliers to reflect the proposed changes in base rates, we employed the same methodology as the original calculations, as described below.

To calculate the Level 1 Penalty Surcharge Multiplier, we first estimated the excess water use that would be subject to the surcharge (i.e., the volume of water in excess of 70% of a customer’s baseline). As previously described, the City-wide water use cutback was estimated at 18.8% during FY 2015-16, compared to FY 2013-14 (two years prior).

The estimated volume of water subject to the Level 1 Penalty Surcharge by the revised number and size of tiers and by service location (i.e., Beverly Hills and West Hollywood) totaled 453,757



hcf. By multiplying each tier's estimated excess water use by the respective tier's proposed base rates (to be effective February 2016), we establish that a multiplier of 0.44 on the current base rates would generate the Level 1 Risk Costs of \$2,763,708 (Figure 4).

**Figure 4. Derivation of Level 1 Penalty Surcharge Multiplier - February 2016**  
 (charged on water use exceeding 70% of a customer's baseline\*)

Customer Class	Estimated Use Subject to Penalty	Proposed Base Rates	Revenue at Base Rate
<u>Beverly Hills - Single Family</u>			
Tier 1**	n/a	\$4.32	n/a
Tier 2	33,899 hcf	\$5.17	\$175,174
Tier 3	49,112 hcf	\$9.27	\$455,177
Tier 4	165,844 hcf	\$18.59	\$3,083,154
<u>Beverly Hills - Multi Family</u>			
Tier 1**	n/a	\$4.72	n/a
Tier 2	59,097 hcf	\$17.50	\$1,034,324
<u>Beverly Hills - Commercial</u>			
Tier 1	15,900 hcf	\$4.40	\$70,006
Tier 2	2,301 hcf	\$4.90	\$11,271
Tier 3	4,078 hcf	\$6.90	\$28,129
Tier 4	84,935 hcf	\$9.99	\$848,502
<u>West Hollywood - Single Family</u>			
Tier 1**	n/a	\$5.40	n/a
Tier 2	2,095 hcf	\$6.46	\$13,535
Tier 3	1,196 hcf	\$11.59	\$13,853
Tier 4	753 hcf	\$23.24	\$17,503
<u>West Hollywood - Multi Family</u>			
Tier 1**	n/a	\$5.90	n/a
Tier 2	12,908 hcf	\$21.88	\$282,404
<u>West Hollywood - Commercial</u>			
Tier 1	5,431 hcf	\$5.50	\$29,893
Tier 2	813 hcf	\$6.12	\$4,980
Tier 3	941 hcf	\$8.62	\$8,112
Tier 4	14,453 hcf	\$12.49	\$180,488
Total	453,757 hcf		\$6,256,505 <b>a</b>
		City Costs	\$1,763,708
		SWCRB Fines	\$1,000,000
		<b>Total Level 1 Risk Costs</b>	<b>\$2,763,708 <b>b</b></b>
		<b>Level 1 Penalty Surcharge Base Rate Multiplier</b>	<b>0.44 <b>b/a</b></b>

\* Baselines are actual water use from the corresponding billing period in 2013

\*\* In accordance with Stage D, Tier 1 residential customers are not subject to the penalty surcharge



A similar calculation was made to determine the Level 2 Penalty Surcharge multiplier, as shown in Figure 5, we establish that a multiplier of 2.29 on the current base rates would generate the Level 2 Risk Costs of \$3,821,897.

**Figure 5. Derivation of Level 2 Penalty Surcharge Multiplier - February 2016**  
 (charged on water use exceeding 88% of a customer's baseline\*)

Customer Class	Estimated Use Subject to Penalty	Proposed Base Rates	Revenue at Base Rate
<u>Beverly Hills - Single Family</u>			
Tier 1**	n/a	\$4.32	n/a
Tier 2	9,040 hcf	\$5.17	\$46,713
Tier 3	13,097 hcf	\$9.27	\$121,381
Tier 4	44,225 hcf	\$18.59	\$822,174
<u>Beverly Hills - Multi Family</u>			
Tier 1**	n/a	\$4.72	n/a
Tier 2	15,759 hcf	\$17.50	\$275,820
<u>Beverly Hills - Commercial</u>			
Tier 1	4,240 hcf	\$4.40	\$18,668
Tier 2	614 hcf	\$4.90	\$3,005
Tier 3	1,087 hcf	\$6.90	\$7,501
Tier 4	22,649 hcf	\$9.99	\$226,267
<u>West Hollywood - Single Family</u>			
Tier 1**	n/a	\$5.40	n/a
Tier 2	559 hcf	\$6.46	\$3,609
Tier 3	319 hcf	\$11.59	\$3,694
Tier 4	201 hcf	\$23.24	\$4,667
<u>West Hollywood - Multi Family</u>			
Tier 1**	n/a	\$5.90	n/a
Tier 2	3,442 hcf	\$21.88	\$75,308
<u>West Hollywood - Commercial</u>			
Tier 1	1,448 hcf	\$5.50	\$7,971
Tier 2	217 hcf	\$6.12	\$1,328
Tier 3	251 hcf	\$8.62	\$2,163
Tier 4	3,854 hcf	\$12.49	\$48,130
Total	121,002 hcf		\$1,668,401 <b>a</b>
		<b>Level 2 Risk Costs (MWD Costs)</b>	<b>\$3,821,897 <b>b</b></b>
		<b>Level 1 Penalty Surcharge Base Rate Multiplier</b>	<b>2.29 <b>b/a</b></b>

\* Baselines are actual water use from the corresponding billing period in 2013

\*\* In accordance with Stage D, Tier 1 residential customers are not subject to the penalty surcharge

Ms. Trish Rhay  
December 22, 2015  
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The penalty surcharges are levied for conservation infractions and are not part of rate structure. They are not subject to Proposition 218 and would become effective as the same effective date of the revised base rates.

Very truly yours,

HF&H CONSULTANTS, LLC

John W. Farnkopf, P.E., Senior Vice President  
Rick Simonson, C.M.C., Vice President