

Are we getting the most out of our energy efficiency programs?

Robert Barrett - Veolia Project Manager
Tim Parker - Veolia Production Ops Manager



Do you currently have an energy efficiency program?

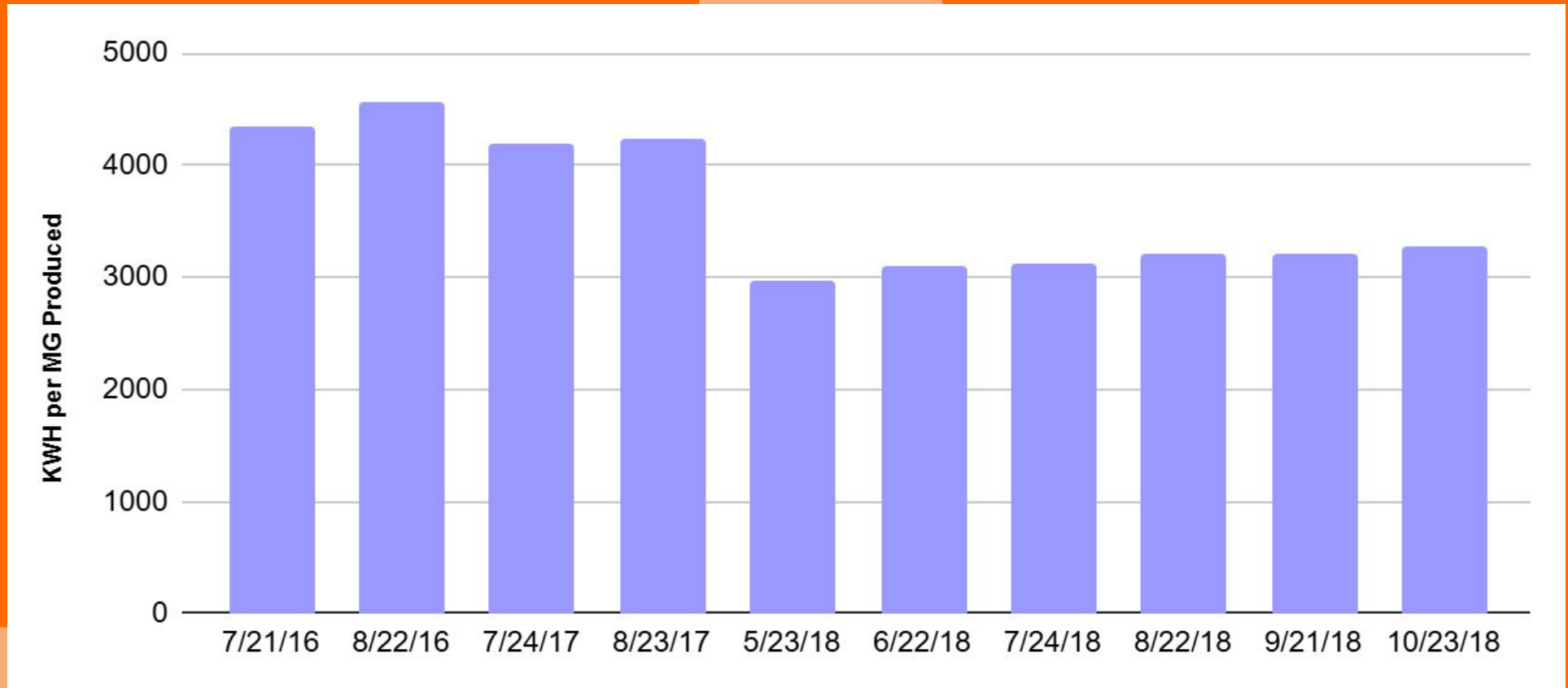


Comparing power bills with meter readings

Power Analysis Report

<i>Site Name</i>	<i>Start Date</i>	<i>Ending Date</i>	<i>KWH Used</i>	<i>Total Billing</i>	<i>MG Produced</i>	<i>KWH per MG</i>	<i>Dollars per MG</i>	<i>Run Hours</i>
RAPTOR	6/22/16	7/21/16	37680	\$3,622	8.677	4343	\$417	190.1
RAPTOR	7/22/16	8/22/16	38600	\$3,664	8.453	4566	\$433	186.9
RAPTOR	6/22/17	7/24/17	62440	\$5,084	14.866	4200	\$342	311.0
RAPTOR	7/25/17	8/23/17	28480	\$3,108	6.722	4237	\$462	138.9
RAPTOR	4/24/18	5/23/18	14840	\$1,927	5.003	2966	\$385	87.0
RAPTOR	6/1/18	6/22/18	20592	\$2,865	6.645	3099	\$431	109.2
RAPTOR	6/23/18	7/24/18	114240	\$7,619	36.499	3130	\$209	598.9
RAPTOR	7/25/18	8/22/18	135120	\$8,772	42.103	3209	\$208	691.7
RAPTOR	8/23/18	9/21/18	131600	\$7,907	40.982	3211	\$193	672.1
RAPTOR	9/22/18	10/23/18	78440	\$4,999	24.004	3268	\$208	394.4

Comparing power bills with meter readings

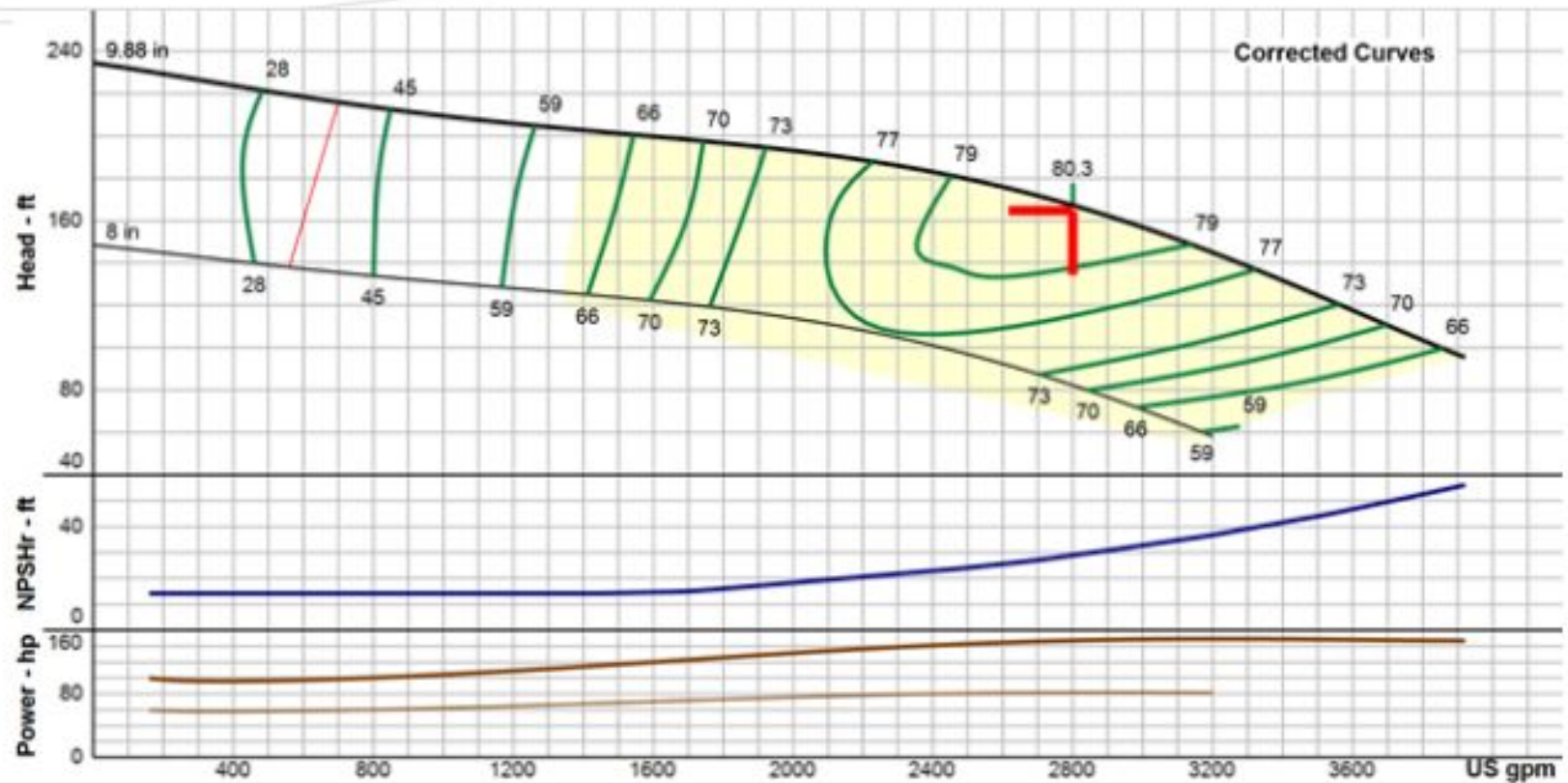


Pump curves

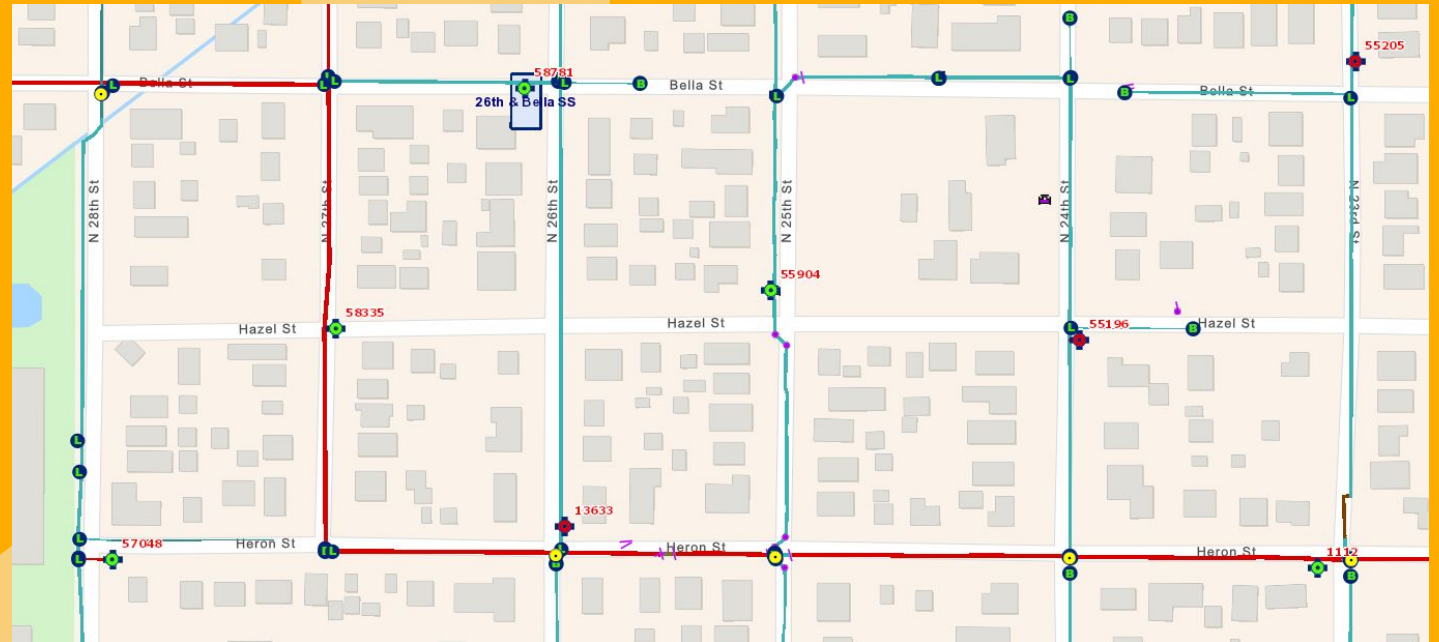
Product Name: VIT - Short Set Lineshaft Turbine Pumps
Product Id: VIT

Quote Number

9001-250317-009



Inside facility and system valving



Third party review

1																			
2	Source	Energy Intensity (kWh/MG)												Comparisons					
3	Service Name	2023 gal	2024 gal	2016 Int	2017 Int	2018 Int	2019 Int	2020 Int	2021 Int	2022 Int	2023 Int	2024 Int	2020/2019	2021/2020	2022/2021	2023/2022	2024/2023		
9	BALI HAI	160	255,788,640	229,224,960	#DIV/0!	2,317	2,133	2,244	2,166	2,208	1,897	1,821	1.830	97%	102%	86%	96%	101%	
10	BEACON	196	37,859,040	57,912,480	667,000	#DIV/0!	#DIV/0!	1,777	1,610	1,772	1,857	2,274	1.830	91%	110%	105%	122%	80%	
11	BERGESON	320	34,104,960	70,689,600	1,100,000	#DIV/0!	#DIV/0!	2,224	2,120	2,025	2,419	2,259	2.051	95%	96%	119%	93%	91%	
12	BETHEL	360	506,833,920	758,655,360	1,148	1,139	1,172	1,152	1,185	1,107	1,046	1,037	997	103%	93%	94%	99%	96%	
13	BIF	280	42,125,760	50,420,160	2,792	#DIV/0!	2,441	2,621	2,626	2,965	3,303	3,008	2.659	100%	113%	111%	91%	88%	
14	BROADWAY	380	461,874,240	300,206,880	2,256	2,207	2,252	2,199	1,875	1,872	1,848	1,257	1.883	85%	100%	99%	68%	150%	
15	BROOKHOLLOW	320	33,183,360	48,862,080	1,698	1,663	1,538	1,660	1,801	1,738	1,765	1,754	1.746	109%	96%	102%	99%	100%	
16	CASSIA 1&2	340	133,747,200	166,069,440	1,599	1,590	1,547	1,467	1,573	1,489	1,607	1,669	1.534	107%	95%	108%	104%	92%	
18	CENTENNIAL	760	107,881,920	111,559,680	1,811	1,843	1,797	1,816	1,867	1,784	1,783	1,796	1.831	103%	96%	100%	101%	102%	
21	CHAMBERLAIN 1&2	240	90,478,080	47,816,640	#DIV/0!		1,549	1,201	1,254	1,421	1,484	1,350	1.318	104%	113%	104%	91%	98%	
22	CLIFFSIDE	531	119,887,459	131,440,320	#DIV/0!	1,038	1,053	1,064	1,097	1,083	1,101	1,097	1.137	103%	99%	102%	100%	104%	
23	CLINTON	340	137,171,520	125,029,440	1,352	1,425	1,302	1,324	1,412	1,484	1,804	1,516	1.527	107%	105%	122%	84%	101%	
24	COLE	200	30,312,000	38,443,680	1,453	1,784	2,247	1,645	2,076	1,914	2,181	1,886	1.813	126%	92%	114%	86%	96%	
25	Columbia WTP	920	854,742,240	1,816,178,400	3,458	3,655	3,794	3,582	3,658	3,414	3,239	3,447	3.003	102%	93%	95%	106%	87%	
26	COUNTRY CLUB	300	107,645,760	135,786,240	2,530	1,634	1,639	1,444	1,614	1,627	1,605	1,749	1.726	112%	101%	99%	109%	99%	
27	COUNTRY SQUARE	720	221,135,040	300,780,000	1,767	1,806	1,831	1,795	1,817	1,831	1,837	1,866	1.641	101%	101%	100%	102%	88%	
29	DURHAM	160	54,027,360	52,636,320	1,580	1,600	1,672	1,072	1,116	1,122	1,147	1,198	1.190	104%	101%	102%	104%	99%	
30	EDGE VIEW	340	12,242,880	11,276,640	1,392	1,765	1,663	1,710	2,007	1,725	2,143	1,971	1.943	117%	86%	124%	92%	99%	
31	FISK	169	403,189,920	368,115,840	1,519	1,605	1,875	1,941	1,948	1,897	1,956	1,744	1.722	100%	97%	103%	89%	99%	
32	FIVE MILE #12	300	15,906,240	15,066,720	2,118	2,090	1,918	1,743	1,197	1,316	1,280	1,582	2.340	69%	110%	97%	124%	148%	
33	FLOATING FEATHER	380	569,440,800	464,500,800	1,879	1,837	1,834	1,760	1,752	1,648	1,667	1,710	1.699	100%	94%	101%	103%	99%	
34	593 1/2 W GRAY FOX CT	572	28,726,560	34,292,160		54,194	1,882	2,824	1,656	1,432	1,511	1,808	1.647	59%	86%	105%	120%	91%	
35	FRANKLIN PARK	500	424,702,080	467,102,880	1,353	1,371	1,334	1,318	1,327	1,338	1,335	1,210	1.202	101%	101%	100%	91%	99%	
36	FRONTIER	300	50,340,960	63,244,800	1,857	1,856	1,510	1,487	1,777	1,365	1,409	1,419	1.543	120%	77%	103%	101%	109%	
37	GODDARD	380	183,650,400	265,717,440	2,223	2,258	2,299	2,336	2,386	2,338	2,605	2,254	2.076	102%	98%	111%	87%	92%	
38	HIDDEN VALLEY #1	340	237,710,880	291,036,960	2,046	2,359	1,760	1,776	1,718	1,747	1,754	1,786	1.827	97%	102%	100%	102%	102%	
39	HIDDEN VALLEY #2	280	76,667,040	3,804,480	1,747	1,583	1,675	1,622	1,692	1,826	3,051	1,706	4.588	104%	108%	167%	56%	269%	

Other energy efficiency ideas

- Leaks / Non-revenue water
- Equipment status readings
- New equipment
- Real time data access and display
- Performance testing
- System operation



FlexPeak Load-shed Partnership

Program Details



Who can participate	Idaho Power's commercial and industrial customers
Minimum qualifications	Ability to reduce electrical load at least 20 kilowatts (kW) during an event
Season	Summer (June 15-Sept. 15)
Event times	Between 3-10 p.m. Monday-Friday
Event duration	2-4 hours
Minimum number of events	At least three events per season, no more than 60 total hours per season
Event notification	Four hours prior to event via phone, text, and email

How Much Can I Expect For The Season?

Tiered Fixed Capacity Payment Rate Structure *

Variable Energy Payment

Rate **

Average Season Performance Percentage	Fixed Capacity Payment Rate per kW	\$0.20 per kilowatt-hour (kWh) (Actual kW reduction x Hours of event)
75–120%	\$3.25	
50–74.99%	\$2.44	
25–49.99%	\$1.63	
Greater than 0–24.99%	\$0.81	

*To be prorated for partial weeks

**Applies after third program event

Baseline Calculation

- 10 day Peak hr kW
- 3 hour average
- Load must be on between 1-7pm during baseline days.
- Day of Load Adjustment =
Baseline /kW demand
Preceding notification
- Cannot exceed %110

Day	3-4 PM (kW)	4-5 PM (kW)	5-6 PM (kW)	6-7 PM (kW)	7-8 PM (kW)	8-9 PM (kW)	9-10 PM (kW)	Sum Total (kW)
1	3000	3100	3000	3200	3000	3200	3150	21650
2	3200	3100	3200	3200	3100	3300	3300	22400
3	3100	3200	3100	3100	3200	3100	3200	22000
4	3250	3400	3300	3400	3300	3400	3200	23250
5	3300	3400	3300	3400	3400	3500	3400	23700
6	3100	3000	3200	3100	3100	3200	3300	22000
7	3400	3300	3400	3300	3400	3300	3200	23300
8	3300	3200	3300	3300	3300	3200	3100	22700
9	3400	3500	3350	3400	3500	3400	3350	23900
10	3250	3300	3300	3200	3200	3200	3300	22750
Original Baseline (kW)	3367	3400	3350	3367	3433	3400	3317	

Major Projects

- 2018 - Sunset Peak Tank (1.16 Million Gallons)
- 2018 - Redwood Creek 24" pipeline
- 2019 - Hidden Springs Tank (.6 Million Gallons)
- 2020 - Redwood Creek well upgrade to 2800 GPM
- 2020 - Columbia WTP Clearwell (1 Million Gallons)
- 2022 - Whistle Pig Tank (3 Million Gallons)
- 2023 - Columbia WTP expansion (6 to 10 MGD)
- 2024 - Well 6 - West Main Zone (500 to 2000 GPM)
- 2025 - Columbia Tank #2 (6.6 Million Gallons)





Idaho Power Peak Response Results

Veolia				
Idaho Power Peak Response Results				
Year	Number of events	Average Nomination	Reduction average	Incentive
2018	3	1,705 KW	155 kW	\$0.00
2019	3	1,705 KW	979 kW	\$21,115.00
2020	3	1,705 KW	690 kW	\$14,165.00
2021	5	1,705 KW	661 kW	\$6,020.44
2022	7	1,705 KW	1560 kW	\$39,891.00
2023	3	1,705 KW	1464 kW	\$72,812.00
2024	4	2,188 KW	1960 kW	\$78,375.00

Results - 2019 to 2023

Aggregated Vs Single Site Nomination



Sites	Nomination (kW)	2019 Average Reduction (kW)	2019 Average Percentage	2019 Peak Reduction (kW)	2020 Average Reduction (kW)	2020 Average Percentage	2020 Peak Reduction (kW)	2021 Average Reduction (kW)	2021 Average Percentage	2021 Peak Reduction (kW)	2022 Average Reduction (kW)	2022 Average Percentage	2022 Peak Reduction (kW)	2023 Average Reduction (kW)	2023 Average Percentage	2023 Peak Reduction (kW)
Columbia WTP	120	88	73%	158	36	30%	80	9	8%	26	128	107%	156	144	120%	251
Boise River	490	328	67%	566	122	25%	356	29	6%	128	406	83%	564	507	104%	536
Ten Mile Well	240	127	53%	195	131	55%	200	35	15%	160	197	82%	200	86	36%	195
Flying Hawk Pump	180	114	63%	212	0	0%	2	158	88%	227	130	72%	206	94	52%	214
Pioneer Well	300	111	37%	202	83	28%	198	193	64%	200	171	57%	251	85	28%	202
Pleasant Valley	375	127	34%	277	90	24%	300	60	16%	289	299	80%	367	351	94%	360
Floating Feather	325	84	26%	230	228	70%	279	177	54%	246	229	71%	258	197	60%	272
Aggregated	1705	Aggregated	\$ 19,933.25		Aggregated	\$ 7,947.75		Aggregated	\$ 2,496.39		Aggregated	\$ 32,602.70		Aggregated	\$ 62,534.06	
Floating Feather	325	Single Site	\$ 1,181.75		Single Site	\$ 6,217.25		Single Site	\$ 3,524.05		Single Site	\$ 7,288.81		Single Site	\$ 10,277.94	
Total			\$ 21,115.00			\$ 14,165.00			\$ 6,020.44			\$ 39,891.51			\$ 72,812.00	

2024 Results

>75%
50%-75%
<50%

Sites	Nomination (kW)	2024 Average Reduction (kW)	2024 Average Percentage	2024 Participation Incentive
Columbia WTP	175	152	87%	\$6,455.45
Boise River	575	599	104%	\$25,334.16
Ten Mile Well	175	189	108%	\$7,996.69
Flying Hawk Pump	125	48	38%	\$1,018.89
Pioneer Well	188	178	95%	\$7,523.14
Pleasant Valley	300	253	84%	\$10,717.42
Sunset West	200	215	108%	\$9,094.31
Floating Feather & Redwood creek	450	322	72%	\$10,235.65
Aggregated	450	Aggregated		\$10,235.65
Single Sites	1738	Single Site		\$68,140.06
Total				\$78,375.71

Example 1

Aggregated

- Calculated across 13 weeks
- Aggregated baseline
- Time of use
- Peak demand usage
- 50 - 74% reward
- Lower nomination to
325 kw = \$3,400 gain

IDAHO POWER FLEX PEAK PROGRAM

VEOLIA PERFORMANCE SUMMARY

Event Dates with Performance for all Aggregated Sites

DATE	7/11/2024	7/24/2024	8/2/2024	8/22/2024
Notification Hour	2:00 PM	1:00 PM	2:00 PM	2:00 PM
Starting Hour	6:00 PM	5:00 PM	6:00 PM	6:00 PM
Ending Hour	10:00 PM	8:00 PM	10:00 PM	10:00 PM
Nomination (kW)	450	450	450	450
Average Performance (kW)	247	390	459	195
Performance Capped at 120% (kW)	247	390	459	195
Average Participation %	54.89%	86.67%	102.06%	43.22%

Fixed Incentive Tier

Average Seasonal Performance

322.69 kW

Average Nomination

450 kW

Participation %

= 71.71%

Fixed Incentive Tiers	
75-120%	\$3.25
50-74.9%	\$2.44
25-49.9%	\$1.63
0-24.9%	\$0.81

Incentive Calculations

Fixed Incentive/kW:	\$2.44
Average Performance:	X 322.69
Weekly Incentive:	\$787.36
* Variable Incentive:	\$0.00

# of Days	Week	Incentive	# of Days	Week	Incentive
5	06/17 - 06/21	\$787.36	5	08/05 - 08/09	\$787.36
5	06/24 - 06/28	\$787.36	5	08/12 - 08/16	\$787.36
5	07/01 - 07/05	\$787.36	5	08/19 - 08/23	\$787.36
5	07/08 - 07/12	\$787.36	5	08/26 - 08/30	\$787.36
5	07/15 - 07/19	\$787.36	5	09/02 - 09/06	\$787.36
5	07/22 - 07/26	\$787.36	5	09/09 - 09/13	\$787.36
5	07/29 - 08/02	\$787.36			

* The variable incentive offers an additional \$0.20 per kWh saved after the first four events.

TOTAL PARTICIPATION INCENTIVE: \$10,235.65

Example 2

Raptor Well

- Baseline calculation
- Daily usage
- Time of use
- 100% peak usage
- 25 - 49 % reward

Event Dates with Performance for 5650 W FLYING HAWK LN /BOISE ID 83709-7289

DATE	7/11/2024	7/24/2024	8/2/2024	8/22/2024
Notification Hour	2:00 PM	1:00 PM	2:00 PM	2:00 PM
Starting Hour	6:00 PM	5:00 PM	6:00 PM	6:00 PM
Ending Hour	10:00 PM	8:00 PM	10:00 PM	10:00 PM
Nomination (kW)	125	125	125	125
Average Performance (kW)	0	42	156	0
Performance Capped at 120% (kW)	0	42	150	0
Average Participation %	0.00%	33.87%	120.00%	0.00%

Fixed Incentive Tier

$$\frac{\text{Average Seasonal Performance}}{\text{Average Nomination}} = \text{Participation \%}$$

48.08 kW / 125 kW = 38.47%

Fixed Incentive Tiers	
75-120%	\$3.25
50-74.9%	\$2.44
25-49.9%	\$1.63
0-24.9%	\$0.81

Incentive Calculations

Fixed Incentive/kW: \$1.63
 Average Performance: X 48.08
 Weekly Incentive: \$78.38

* Variable Incentive: \$0.00

# of Days	Week	Incentive	# of Days	Week	Incentive
5	06/17 - 06/21	\$78.38	5	08/05 - 08/09	\$78.38
5	06/24 - 06/28	\$78.38	5	08/12 - 08/16	\$78.38
5	07/01 - 07/05	\$78.38	5	08/19 - 08/23	\$78.38
5	07/08 - 07/12	\$78.38	5	08/26 - 08/30	\$78.38
5	07/15 - 07/19	\$78.38	5	09/02 - 09/06	\$78.38
5	07/22 - 07/26	\$78.38	5	09/09 - 09/13	\$78.38
5	07/29 - 08/02	\$78.38			

* The variable incentive offers an additional \$0.20 per kWh saved after the first four events.

TOTAL PARTICIPATION INCENTIVE: \$1,018.89

Example 3

Pleasant Valley Well

- Consistant usage
- Accurate nomination
- 108 % reward

IDAHO POWER FLEX PEAK PROGRAM



Veolia Water Idaho Inc 3 PERFORMANCE SUMMARY

Event Dates with Performance for 10101 PLEASANT VALLEY RD /BOISE ID 83705-0000

DATE	7/11/2024	7/24/2024	8/2/2024	8/22/2024
Notification Hour	2:00 PM	1:00 PM	2:00 PM	2:00 PM
Starting Hour	6:00 PM	5:00 PM	6:00 PM	6:00 PM
Ending Hour	10:00 PM	8:00 PM	10:00 PM	10:00 PM
Nomination (kW)	175	175	175	175
Average Performance (kW)	194	192	181	191
Performance Capped at 120% (kW)	194	192	181	191
Average Participation %	110.57%	109.90%	103.14%	109.00%

Fixed Incentive Tier

Average Seasonal Performance

189.27 kW

Average Nomination

175 kW

Participation %

= 108.15%

Fixed Incentive Tiers	
75-120%	\$3.25
50-74.9%	\$2.44
25-49.9%	\$1.63
0-24.9%	\$0.81

Incentive Calculations

Fixed Incentive/kW: \$3.25
 Average Performance: X 189.27
 Weekly Incentive: \$615.13
 * Variable Incentive: \$0.00

# of Days	Week	Incentive	# of Days	Week	Incentive
5	06/17 - 06/21	\$615.13	5	08/05 - 08/09	\$615.13
5	06/24 - 06/28	\$615.13	5	08/12 - 08/16	\$615.13
5	07/01 - 07/05	\$615.13	5	08/19 - 08/23	\$615.13
5	07/08 - 07/12	\$615.13	5	08/26 - 08/30	\$615.13
5	07/15 - 07/19	\$615.13	5	09/02 - 09/06	\$615.13
5	07/22 - 07/26	\$615.13	5	09/09 - 09/13	\$615.13
5	07/29 - 08/02	\$615.13			

* The variable incentive offers an additional \$0.20 per kWh saved after the first four events.

TOTAL PARTICIPATION INCENTIVE: \$7,996.69

Q&A

Thank you.

Robert Barrett - Veolia Project Manager

Tim Parker - Veolia Production Ops Manager

