

Appendix R

Energy

Appendix R.1

Energy Calculations for the
Crossroads Hollywood Project

Crossroads Hollywood - Energy Calculations

Summary of Energy Use During Construction

	Existing	Project Without Project Features	Project With Project Features
Electricity			
Water Consumption	-	17,858.86	17,858.86 kWh
Total:	-	17,858.86	17,858.86 kWh
Gasoline			
On Road	-	290,256.96	290,256.96 Gallons
Off Road	-	-	-
Total:	-	290,256.96	290,256.96 Gallons
Diesel			
On Road	-	308,782.08	308,782.08 Gallons
Off Road	-	185,335.60	185,335.60 Gallons
Total:	-	494,117.68	494,117.68 Gallons

Summary of Energy Use During Operations

	Existing	NIERM	Project With Project Features	Percent Reduction	Net
Electricity					
Electricity (building)	2,079,029	17,037,956	14,130,981 kWh/Year	-17%	12,051,952
Electricity (water)	369,884	1,881,515	1,143,016 kWh/Year	-39%	773,131
Electricity Total	2,448,913	18,919,471	15,273,997 kWh/Year	-19%	12,825,083
Natural Gas					
	2,341,123	36,769,333	29,642,417 cu ft/year	-19%	27,301,294
Mobile					
Gasoline	242,491	2,664,954	1,463,456 Gallons	-45%	1,220,965
Diesel	43,493	477,979	262,481 Gallons	-45%	218,989

Calculation of Diesel Usage During Construction (Offroad Equipment):

Phase Name	Off Road Equipment Type	Units	Hours	HP	Load Factor	Avg. Daily Factor	Number of Days	Diesel Fuel Usage
Demolition	Air Compressors	3	8	78	0.48	0.6	23	620
Demolition	Concrete/Industrial Saws	3	8	81	0.73	0.6	23	979
Demolition	Cranes	1	8	226	0.29	0.6	23	362
Demolition	Excavators	2	8	162	0.38	0.6	23	680
Demolition	Rubber Tired Dozers	0	8	255	0.4	0.6	23	0
Demolition	Rubber Tired Loaders	2	8	199	0.36	0.6	23	791
Demolition	Welders	1	8	46	0.45	0.6	23	114
Grading	Bore/Drill Rigs	2	8	205	0.5	0.6	107	5,264
Grading	Cranes	2	8	226	0.29	0.6	107	3,366
Grading	Excavators	4	8	162	0.38	0.6	107	6,323
Grading	Graders	0	8	174	0.41	0.6	107	0
Grading	Pumps	4	8	84	0.74	0.6	107	6,385
Grading	Rubber Tired Dozers	0	8	255	0.4	0.6	107	0
Grading	Scrapers	0	8	361	0.48	0.6	107	0
Grading	Tractors/Loaders/Backhoes	0	8	97	0.37	0.6	107	0
Foundation	Cement and Mortar Mixers	2	8	9	0.56	0.6	131	317
Foundation	Concrete/Industrial Saws	2	8	81	0.73	0.6	131	3,718
Foundation	Cranes	2	8	226	0.29	0.6	131	4,121
Foundation	Plate Compactors	2	8	8	0.43	0.6	131	216
Foundation	Pumps	2	8	84	0.74	0.6	131	3,909
Foundation	Rubber Tired Dozers	0	8	255	0.4	0.6	131	0
Foundation	Tractors/Loaders/Backhoes	0	8	97	0.37	0.6	131	0
Foundation	Welders	2	8	46	0.45	0.6	131	1,302
Building Const	Aerial Lifts	4	8	62	0.31	0.6	718	13,248
Building Const	Air Compressors	4	8	78	0.48	0.6	718	25,807
Building Const	Cement and Mortar Mixers	3	8	9	0.56	0.6	718	2,605
Building Const	Concrete/Industrial Saws	1	8	81	0.73	0.6	718	10,189
Building Const	Cranes	3	8	226	0.29	0.6	718	33,882
Building Const	Forklifts	4	8	89	0.2	0.6	718	12,269
Building Const	Generator Sets	0	8	84	0.74	0.6	718	0
Building Const	Plate Compactors	3	8	8	0.43	0.6	718	1,778
Building Const	Pumps	3	8	84	0.74	0.6	718	32,134
Building Const	Tractors/Loaders/Backhoes	0	7	97	0.37	0.6	718	0
Building Const	Welders	3	8	46	0.45	0.6	718	10,701
Architectural C	Air Compressors	0	6	78	0.48	0.6	349	0
Paving	Cement and Mortar Mixers	2	8	9	0.56	0.6	66	160
Paving	Pavers	0	8	125	0.42	0.6	66	0
Paving	Paving Equipment	1	8	130	0.36	0.6	66	741
Paving	Pumps	1	8	84	0.74	0.6	66	985
Paving	Rollers	1	8	80	0.38	0.6	66	482
Paving	Skid Steer Loaders	2	8	64	0.37	0.6	66	750
Paving	Tractors/Loaders/Backhoes	2	8	97	0.37	0.6	66	1,137
Total Diesel Usage for Construction (Offroad Equipment):								185,335.6 gallons of diesel fuel

gallons of diesel fuel per horsepower-hour= 0.05

Notes: Equipment assumptions are provide in the CalEEMod output files and fuel usage estimate of 0.05 gallons of diesel fuel per horsepower-hour is from the SCAQMD CEQA Air Quality Handbook, Table A9-3E.

EMFAC2011 Emissions Inventory

Region Type: Air Basin

Region: South Coast

Calendar Year: 2018

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Region	Veh_Class	Fuel	Speed (miles/hr)	Population (vehicles)	VMT (miles/day)	Trips (trips/day)	Fuel_Gas (1000 gallons/day)	Fuel_DSL (1000 gallons/day)	Miles per Gallon
South Coast	LDA	GAS	Aggregate	5875768.44	200195489.9	37093739.66	8824.495621	0	22.7
South Coast	LDT1	GAS	Aggregate	688812.912	23474880.58	4178427.192	1195.140883	0	19.6
South Coast	LDT2	GAS	Aggregate	1941482.89	70793524.59	12222710.26	4228.717295	0	16.7
						Construction Worker Trip (Composite LDA/LDT1/LDT2):			20.4
South Coast	T7 tractor cnstruction	DSL	Aggregate	4134.94479	324016.2809	0	0	56.8242173	5.7

Notes: Consistent with CalEEMod, a construction worker trip is assumed to be a composite of 50% LDA , 25% for LDT1, and 25% for LDT2. Used EMFAC 2011 Categories for construction as EMFAC2011 has specific categories for vehicle class T7.

EMFAC Emission inventories by YEAR (for construction)

Region	Year	Veh_Class	Fuel	Speed (miles/hr)	Population (vehicles)	VMT (miles/day)	Trips (trips/day)	Fuel_Gas (1000 gallons/day)	Fuel_DSL (1000 gallons/day)
2014									
South Coast	2014	LDA	GAS	Aggregate	5709319.143	194237886.1	36008922.98	8571.153001	0
South Coast	2014	LDT1	GAS	Aggregate	670016.336	22795555.1	4082956.291	1163.336552	0
South Coast	2014	LDT2	GAS	Aggregate	1872764.99	67853522.09	11803399.83	4066.595355	0
South Coast	2014	T7 tractor cnstruction	DSL	Aggregate	3353.241027	254681.6838	0	0	44.63670352
2015									
South Coast	2015	LDA	GAS	Aggregate	5750933.419	195754897.6	36284485.76	8641.562957	0
South Coast	2015	LDT1	GAS	Aggregate	674908.826	22995203.82	4108313.314	1173.354635	0
South Coast	2015	LDT2	GAS	Aggregate	1889192.017	68545985.7	11901361.36	4106.668496	0
South Coast	2015	T7 tractor cnstruction	DSL	Aggregate	3605.689826	274612.4225	0	0	48.10392447
2016									
South Coast	2016	LDA	GAS	Aggregate	5792945.81	197227585.3	36554821.9	8702.393248	0
South Coast	2016	LDT1	GAS	Aggregate	679603.7711	23162319.54	4131718.316	1180.89948	0
South Coast	2016	LDT2	GAS	Aggregate	1906231.485	69273763.33	12003785.52	4145.80356	0
South Coast	2016	T7 tractor cnstruction	DSL	Aggregate	3841.571738	295135.454	0	0	51.85201596
2017									
South Coast	2017	LDA	GAS	Aggregate	5835352.656	198767641	36831738.7	8765.730578	0
South Coast	2017	LDT1	GAS	Aggregate	684346.7714	23328352.92	4155711.052	1188.493997	0
South Coast	2017	LDT2	GAS	Aggregate	1923490.645	70021607.67	12110390.77	4186.317435	0
South Coast	2017	T7 tractor cnstruction	DSL	Aggregate	4070.250434	316257.0426	0	0	55.51389613
2018									
South Coast	2018	LDA	GAS	Aggregate	5875768.442	200195489.9	37093739.66	8824.495621	0
South Coast	2018	LDT1	GAS	Aggregate	688812.9118	23474880.58	4178427.192	1195.140883	0
South Coast	2018	LDT2	GAS	Aggregate	1941482.89	70793524.59	12222710.26	4228.717295	0
South Coast	2018	T7 tractor cnstruction	DSL	Aggregate	4134.944795	324016.2809	0	0	56.8242173

Calculation of Gasoline and Diesel Usage During Phase 1 Construction (Onroad Vehicles):

Phase Name	Daily Woker Trips	Daily Vendor Trips	Days	Total Worker Trips	Total Vendor Trips	Total Haul Trips	Trip Length (miles)			Total Length (miles)			Avg. Daily Factor (worker and vendor)	Gallons of Fuel	
							Worker	Vendor	Haul	Worker	Vendor	Haul		Gasoline	Diesel
Demolition	76.0	0.0	23.0	1,748.0	0.0	660.0	14.7	6.9	32.0	25,695.6	0.0	21,120.0	0.6	754.3	3,703.9
Grading	76.0	20.0	####	8,132.0	2,140.0	46,100.0	14.7	6.9	32.0	119,540.4	14,766.0	1,475,200.0	0.6	3,509.2	260,266.3
Foundation	88.0	50.0	####	11,528.0	6,550.0	0.0	14.7	6.9	20.0	169,461.6	45,195.0	0.0	0.6	4,974.7	4,755.6
Building Construction	900.0	75.0	####	646,200.0	53,850.0	0.0	14.7	6.9	20.0	9,499,140.0	371,565.0	0.0	0.6	278,854.2	39,097.8
Architectural Coating	0.0	0.0	####	0.0	0.0	0.0	14.7	6.9	20.0	0.0	0.0	0.0	0.6	0.0	0.0
Paving	76.0	20.0	66.0	5,016.0	1,320.0	0.0	14.7	6.9	20.0	73,735.2	9,108.0	0.0	0.6	2,164.6	958.4
Total:													290,257.0	308,782.1	

Worker Miles per gallon= 20.44 gasoline
 Vedor/Haul miles per gallon= 5.70 diesel

Notes: Consistent with CalEEMod worker vehicles are assumed to be gasoline and 50% LDA, 25%LDT1, and 25% LDT2. Vendor and haul trips are assumed to be 100% diesel Heavy Duty Trucks (T7)

Water Usage for Control of Fugitive Dust during Construction:

Phase	Days	Average Daily Acentage Distrubed	Gallons Per Year	Electricity (kWhr)
Demolition	23		0	0
Grading	107	5	1,696,485	16,502
Foundation	131		0	0
Building Construction	718	0	0	0
Architectural Coating	349	0	0	0
Paving	66	1	139,524	1,357
Total:			1,836,009	17,859

Water application rate= 3020 gal/acre/day
kWhr equivalent= 0.01 kWhr

Notes: 1) Gallons per year of water usage for dust control is calculated based on a minimum control efficiency of 66% (three times daily) with an application rate of 3,020 gal/acre/day (Air & Waste Management Association Air Pollution Engineering Manual (1992 Edition)) and average of 26 construction days per month.

2) CalEEMod Default: Each gallon of delivered potable water in Southern California is associated with 0.009727 kWhr of electricity).

EMFAC2011 Emissions Inventory
 Region Type: Air Basin
 Region: South Coast
 Calendar Year: 2022
 Season: Annual
 Vehicle Classification: EMFAC2007 Categories

Region	CalYr	Season	Veh_Class	Fuel	MdYr	Speed (miles/hr)	Population (vehicles)	VMT (miles/day)	Trips (trips/day)	Fuel_Gas (1000 gallons/day)	Fuel_DSL (1000 gallons/day)		
South Coast	2022	Annual	LDA	GAS	Aggregated	Aggregated	6003986.27	203834624.8	37881274	8979.411325	0		
South Coast	2022	Annual	LDA	DSL	Aggregated	Aggregated	20622.0671	649368.2394	127166.2	0	20.85582752		
South Coast	2022	Annual	LDT1	GAS	Aggregated	Aggregated	709614.235	24148511.38	4288047.4	1228.456545	0		
South Coast	2022	Annual	LDT1	DSL	Aggregated	Aggregated	1028.30244	34560.08884	5951.4241	0	1.133515574		
South Coast	2022	Annual	LDT2	GAS	Aggregated	Aggregated	2016981.84	73608549.11	12686638	4389.113693	0		
South Coast	2022	Annual	LDT2	DSL	Aggregated	Aggregated	963.56541	33483.13064	5931.4494	0	1.086849083		
South Coast	2022	Annual	LHD1	GAS	Aggregated	Aggregated	310844.335	13343229.49	4631117.3	997.1949015	0		
South Coast	2022	Annual	LHD1	DSL	Aggregated	Aggregated	100093.797	4131147.145	1259054.1	0	214.6594683		
South Coast	2022	Annual	LHD2	GAS	Aggregated	Aggregated	32340.5809	1398344.345	481826.46	104.7360727	0		
South Coast	2022	Annual	LHD2	DSL	Aggregated	Aggregated	33103.0266	1351476.331	416394.42	0	70.29453498		
South Coast	2022	Annual	MCY	GAS	Aggregated	Aggregated	238964.202	1739170.208	477880.6	43.8836917	0		
South Coast	2022	Annual	MDV	GAS	Aggregated	Aggregated	1684327.21	56830183.05	10380104	4321.684926	0		
South Coast	2022	Annual	MDV	DSL	Aggregated	Aggregated	1702.57601	58019.44574	10360.461	0	1.871473798		
South Coast	2022	Annual	MH	GAS	Aggregated	Aggregated	69028.8572	785143.0299	6905.6468	54.8442708	0		
South Coast	2022	Annual	MH	DSL	Aggregated	Aggregated	12127.254	132612.6833	1212.7254	0	14.81239463		
South Coast	2022	Annual	OBUS	GAS	Aggregated	Aggregated	7363.34026	276236.5072	336270.94	22.01661524	0		
South Coast	2022	Annual	OBUS	DSL	Aggregated	Aggregated	6373.16965	519866.1011	0	0	75.36151746		
South Coast	2022	Annual	SBUS	GAS	Aggregated	Aggregated	1660.89796	59672.34662	6643.5917	5.441562884	0		
South Coast	2022	Annual	SBUS	DSL	Aggregated	Aggregated	4758.42777	170710.1667	0	0	23.66575478		
South Coast	2022	Annual	T6	GAS	Aggregated	Aggregated	25681.978	1227000.819	513845.03	92.54559383	0		
South Coast	2022	Annual	T6	DSL	Aggregated	Aggregated	89267.5428	5376141.722	0	0	597.9394541		
South Coast	2022	Annual	T7	GAS	Aggregated	Aggregated	1745.31544	231605.8895	34920.273	18.17487658	0		
South Coast	2022	Annual	T7	DSL	Aggregated	Aggregated	89153.534	13501381.84	0	0	2416.821803		
South Coast	2022	Annual	UBUS	GAS	Aggregated	Aggregated	1935.50302	207796.6854	7742.0122	18.91540815	0		
South Coast	2022	Annual	UBUS	DSL	Aggregated	Aggregated	7539.38912	808118.6601	30157.556	0	198.2184055		
							Totals	404,456,953.20		20,276.42	3,636.72	MPG	Gallons Per Mile
							Total (GAS)	377,690,067.65	0.93			16.9	0.06
							Total (DSL)	26,766,885.55	0.07			18.6	0.05
												7.4	0.14

EMFAC Emission inventories by YEAR (for operation)

Region	CalYr	Season	Veh_Class	Fuel	MdYr	Speed (miles/hr)	Population (vehicles)	VMT (miles/day)	Trips (trips/day)	Fuel_Gas (1000 gallons/day)	Fuel_DSL (1000 gallons/day)
2015											
South Coast	2015	Annual	LDA	GAS	Aggregated	Aggregated	5750933.419	195754897.6	36284485.76	8641.562957	0
South Coast	2015	Annual	LDA	DSL	Aggregated	Aggregated	19805.07063	633330.6495	116857.3947	0	20.74853492
South Coast	2015	Annual	LDT1	GAS	Aggregated	Aggregated	674908.826	22995203.82	4108313.314	1173.354635	0
South Coast	2015	Annual	LDT1	DSL	Aggregated	Aggregated	980.1618189	31416.02207	5243.184747	0	1.067225628
South Coast	2015	Annual	LDT2	GAS	Aggregated	Aggregated	1889192.017	68545985.7	11901361.36	4106.668496	0
South Coast	2015	Annual	LDT2	DSL	Aggregated	Aggregated	901.3139435	31981.14245	5255.96308	0	1.066527232
South Coast	2015	Annual	LHD1	GAS	Aggregated	Aggregated	280265.7158	12232017.44	4175541.238	921.5340827	0
South Coast	2015	Annual	LHD1	DSL	Aggregated	Aggregated	88549.57582	3749660.123	1113842.216	0	195.6061211
South Coast	2015	Annual	LHD2	GAS	Aggregated	Aggregated	29552.11618	1284430.119	440282.4691	97.11509633	0
South Coast	2015	Annual	LHD2	DSL	Aggregated	Aggregated	29803.61557	1245098.164	374892.0092	0	65.10746238
South Coast	2015	Annual	MCY	GAS	Aggregated	Aggregated	225133.6321	1650794.692	450222.2174	41.42284369	0
South Coast	2015	Annual	MDV	GAS	Aggregated	Aggregated	1561312.901	53241447.64	9758500.746	4047.040485	0
South Coast	2015	Annual	MDV	DSL	Aggregated	Aggregated	1585.762151	54608.6217	9298.389161	0	1.793523176
South Coast	2015	Annual	MH	GAS	Aggregated	Aggregated	60607.61235	676024.3656	6063.185445	48.02283903	0
South Coast	2015	Annual	MH	DSL	Aggregated	Aggregated	10580.6438	116117.0272	1058.064408	0	12.92712931
South Coast	2015	Annual	OBUS	GAS	Aggregated	Aggregated	7008.552804	282256.8856	320068.4241	22.78642729	0
South Coast	2015	Annual	OBUS	DSL	Aggregated	Aggregated	5704.408806	448337.5017	0	0	66.23887046
South Coast	2015	Annual	SBUS	GAS	Aggregated	Aggregated	1520.481338	54664.92216	6081.925385	5.118801347	0
South Coast	2015	Annual	SBUS	DSL	Aggregated	Aggregated	4673.843567	172518.43	0	0	23.97576506
South Coast	2015	Annual	T6	GAS	Aggregated	Aggregated	23577.75181	1117744.992	471743.6495	86.71315408	0
South Coast	2015	Annual	T6	DSL	Aggregated	Aggregated	82856.31232	4782942.185	0	0	538.3292884
South Coast	2015	Annual	T7	GAS	Aggregated	Aggregated	1617.774157	241041.6631	32368.42217	19.14306884	0
South Coast	2015	Annual	T7	DSL	Aggregated	Aggregated	75875.30233	10711732.5	0	0	1923.787728
South Coast	2015	Annual	UBUS	GAS	Aggregated	Aggregated	1798.461225	193134.7967	7193.844788	17.77594158	0
South Coast	2015	Annual	UBUS	DSL	Aggregated	Aggregated	7144.816264	765743.3893	28579.26411	0	194.8641529
2016											
South Coast	2016	Annual	LDA	GAS	Aggregated	Aggregated	5792945.81	197227585.3	36554821.9	8702.393248	0
South Coast	2016	Annual	LDA	DSL	Aggregated	Aggregated	19944.38311	641906.7725	118879.8517	0	20.92368153
South Coast	2016	Annual	LDT1	GAS	Aggregated	Aggregated	679603.7711	23162319.54	4131718.316	1180.89948	0
South Coast	2016	Annual	LDT1	DSL	Aggregated	Aggregated	986.7277194	32799.68335	5390.437624	0	1.101499647
South Coast	2016	Annual	LDT2	GAS	Aggregated	Aggregated	1906231.485	69273763.33	12003785.52	4145.80356	0
South Coast	2016	Annual	LDT2	DSL	Aggregated	Aggregated	909.595298	32749.32759	5384.245268	0	1.083478708
South Coast	2016	Annual	LHD1	GAS	Aggregated	Aggregated	284690.6343	12366184.3	4241466.102	930.8355282	0
South Coast	2016	Annual	LHD1	DSL	Aggregated	Aggregated	90210.02615	3795072.061	1134728.645	0	197.8340004
South Coast	2016	Annual	LHD2	GAS	Aggregated	Aggregated	29939.19346	1297406.09	446049.336	97.97907556	0
South Coast	2016	Annual	LHD2	DSL	Aggregated	Aggregated	30260.04186	1255797.096	380633.2494	0	65.60775039
South Coast	2016	Annual	MCY	GAS	Aggregated	Aggregated	227541.5871	1670667.586	455037.6616	41.95667499	0
South Coast	2016	Annual	MDV	GAS	Aggregated	Aggregated	1578951.338	53597082.47	9841015.784	4075.010172	0
South Coast	2016	Annual	MDV	DSL	Aggregated	Aggregated	1602.617253	55714.55887	9491.371282	0	1.820078132
South Coast	2016	Annual	MH	GAS	Aggregated	Aggregated	61440.6482	687733.2402	6146.522611	48.68236554	0
South Coast	2016	Annual	MH	DSL	Aggregated	Aggregated	10737.48314	117391.92	1073.748334	0	13.07591824
South Coast	2016	Annual	OBUS	GAS	Aggregated	Aggregated	7059.940325	279800.0529	322415.2022	22.55500288	0
South Coast	2016	Annual	OBUS	DSL	Aggregated	Aggregated	5888.30458	462410.8364	0	0	68.17203683
South Coast	2016	Annual	SBUS	GAS	Aggregated	Aggregated	1539.033813	55328.03626	6156.135326	5.155739162	0
South Coast	2016	Annual	SBUS	DSL	Aggregated	Aggregated	4728.280309	173445.121	0	0	24.10532033
South Coast	2016	Annual	T6	GAS	Aggregated	Aggregated	23872.25036	1138606.917	477635.9997	87.84787905	0
South Coast	2016	Annual	T6	DSL	Aggregated	Aggregated	84940.37074	4933187.862	0	0	554.2305029
South Coast	2016	Annual	T7	GAS	Aggregated	Aggregated	1631.330889	241446.7458	32639.66826	19.12008088	0
South Coast	2016	Annual	T7	DSL	Aggregated	Aggregated	78771.49474	11259565.23	0	0	2023.300503
South Coast	2016	Annual	UBUS	GAS	Aggregated	Aggregated	1816.281283	195045.2553	7265.124851	17.92241996	0
South Coast	2016	Annual	UBUS	DSL	Aggregated	Aggregated	7196.829799	771338.9875	28787.3198	0	194.897731
2017											
South Coast	2017	Annual	LDA	GAS	Aggregated	Aggregated	5835352.656	198767641	36831738.7	8765.730578	0
South Coast	2017	Annual	LDA	DSL	Aggregated	Aggregated	20084.94855	649961.2531	120872.5669	0	21.09713809
South Coast	2017	Annual	LDT1	GAS	Aggregated	Aggregated	684346.7714	23328352.92	4155711.052	1188.493997	0
South Coast	2017	Annual	LDT1	DSL	Aggregated	Aggregated	993.358181	33213.21573	5493.221221	0	1.108790844
South Coast	2017	Annual	LDT2	GAS	Aggregated	Aggregated	1923490.645	70021607.67	12110390.77	4186.317435	0
South Coast	2017	Annual	LDT2	DSL	Aggregated	Aggregated	917.9859915	34257.69891	5580.756712	0	1.120751985
South Coast	2017	Annual	LHD1	GAS	Aggregated	Aggregated	289199.535	12514065.57	4308641.949	941.1753676	0
South Coast	2017	Annual	LHD1	DSL	Aggregated	Aggregated	91907.10598	3847269.055	1156075.738	0	200.4185275
South Coast	2017	Annual	LHD2	GAS	Aggregated	Aggregated	30332.11582	1311273.879	451903.2945	98.91005704	0
South Coast	2017	Annual	LHD2	DSL	Aggregated	Aggregated	30724.53904	1265178.558	386476.0568	0	66.04718207
South Coast	2017	Annual	MCY	GAS	Aggregated	Aggregated	229988.4941	1689828.061	459930.98	42.46762226	0
South Coast	2017	Annual	MDV	GAS	Aggregated	Aggregated	1596851.927	54048501.49	9927104.567	4109.926883	0
South Coast	2017	Annual	MDV	DSL	Aggregated	Aggregated	1619.70879	56504.36295	9674.568529	0	1.838680137
South Coast	2017	Annual	MH	GAS	Aggregated	Aggregated	62286.83896	699056.5418	6231.175263	49.33176222	0
South Coast	2017	Annual	MH	DSL	Aggregated	Aggregated	10896.94396	118671.1497	1089.694432	0	13.22500749
South Coast	2017	Annual	OBUS	GAS	Aggregated	Aggregated	7111.755219	277777.218	324781.5006	22.36623471	0
South Coast	2017	Annual	OBUS	DSL	Aggregated	Aggregated	6055.019993	476671.7452	0	0	70.1357162
South Coast	2017	Annual	SBUS	GAS	Aggregated	Aggregated	1557.846865	56000.3854	6231.387415	5.202431248	0
South Coast	2017	Annual	SBUS	DSL	Aggregated	Aggregated	4775.375744	174964.2385	0	0	24.30635322
South Coast	2017	Annual	T6	GAS	Aggregated	Aggregated	24170.94962	1158619.852	483612.3566	88.95071283	0
South Coast	2017	Annual	T6	DSL	Aggregated	Aggregated	86814.86409	5083395.45	0	0	570.2850952
South Coast	2017	Annual	T7	GAS	Aggregated	Aggregated	1645.03903	239641.8193	32913.93945	18.95554389	0
South Coast	2017	Annual	T7	DSL	Aggregated	Aggregated	81503.1858	11807475.88	0	0	2120.71226
South Coast	2017	Annual	UBUS	GAS	Aggregated	Aggregated	1834.326855	196979.7151	7337.307413	18.07485104	0
South Coast	2017	Annual	UBUS	DSL	Aggregated	Aggregated	7249.31005	776985.0278	28997.24127	0	195.8198192

2018										
South Coast	2018 Annual	LDA	GAS	Aggregated	Aggregated	5875768.442	200195489.9	37093739.66	8824.495621	0
South Coast	2018 Annual	LDA	DSL	Aggregated	Aggregated	20218.4465	654024.3306	122603.1713	0	21.16226092
South Coast	2018 Annual	LDT1	GAS	Aggregated	Aggregated	688812.9118	23474880.58	4178427.192	1195.140883	0
South Coast	2018 Annual	LDT1	DSL	Aggregated	Aggregated	999.577953	33722.07483	5601.995889	0	1.119646587
South Coast	2018 Annual	LDT2	GAS	Aggregated	Aggregated	1941482.89	70793524.59	12222710.26	4228.717295	0
South Coast	2018 Annual	LDT2	DSL	Aggregated	Aggregated	926.7308741	34590.09348	5706.788671	0	1.125640108
South Coast	2018 Annual	LHD1	GAS	Aggregated	Aggregated	293543.2366	12665546.72	4373356.522	951.757468	0
South Coast	2018 Annual	LHD1	DSL	Aggregated	Aggregated	93576.41256	3906243.148	1177073.501	0	203.3596241
South Coast	2018 Annual	LHD2	GAS	Aggregated	Aggregated	30703.62901	1326007.263	457438.3072	99.89817194	0
South Coast	2018 Annual	LHD2	DSL	Aggregated	Aggregated	31173.49467	1280800.454	392123.3262	0	66.79873834
South Coast	2018 Annual	MCY	GAS	Aggregated	Aggregated	232716.4757	1710658.736	465386.4167	43.01500591	0
South Coast	2018 Annual	MDV	GAS	Aggregated	Aggregated	1613678.767	54504079.36	10009110.27	4144.63348	0
South Coast	2018 Annual	MDV	DSL	Aggregated	Aggregated	1635.617765	56946.36258	9830.919461	0	1.848448661
South Coast	2018 Annual	MH	GAS	Aggregated	Aggregated	63147.14778	710069.4785	6317.240649	49.98632651	0
South Coast	2018 Annual	MH	DSL	Aggregated	Aggregated	11058.5583	120018.1458	1105.85586	0	13.38172153
South Coast	2018 Annual	OBUS	GAS	Aggregated	Aggregated	7158.584494	275817.3256	326920.1024	22.18620439	0
South Coast	2018 Annual	OBUS	DSL	Aggregated	Aggregated	6129.373871	485013.5007	0	0	71.17662633
South Coast	2018 Annual	SBUS	GAS	Aggregated	Aggregated	1577.049372	56686.00209	6308.197348	5.235168175	0
South Coast	2018 Annual	SBUS	DSL	Aggregated	Aggregated	4769.469343	174026.4181	0	0	24.15702684
South Coast	2018 Annual	T6	GAS	Aggregated	Aggregated	24453.08169	1175656.312	489257.2756	89.86788092	0
South Coast	2018 Annual	T6	DSL	Aggregated	Aggregated	87228.15572	5144220.578	0	0	576.3545618
South Coast	2018 Annual	T7	GAS	Aggregated	Aggregated	1657.366967	236244.4152	33160.59746	18.67516175	0
South Coast	2018 Annual	T7	DSL	Aggregated	Aggregated	82991.99766	12184064.92	0	0	2187.122351
South Coast	2018 Annual	UBUS	GAS	Aggregated	Aggregated	1852.402209	198917.5415	7409.608491	18.21782297	0
South Coast	2018 Annual	UBUS	DSL	Aggregated	Aggregated	7297.455697	782170.3619	29189.82383	0	195.0789439
2019										
South Coast	2019 Annual	LDA	GAS	Aggregated	Aggregated	5919080.897	201726794.5	37369376.96	8872.432331	0
South Coast	2019 Annual	LDA	DSL	Aggregated	Aggregated	20358.00296	657161.3275	124250.341	0	21.22051511
South Coast	2019 Annual	LDT1	GAS	Aggregated	Aggregated	693717.2286	23623176.31	4202494.757	1200.094998	0
South Coast	2019 Annual	LDT1	DSL	Aggregated	Aggregated	1006.284087	34477.52523	5732.034057	0	1.138354115
South Coast	2019 Annual	LDT2	GAS	Aggregated	Aggregated	1960776.565	71580572.68	12342715.58	4265.262875	0
South Coast	2019 Annual	LDT2	DSL	Aggregated	Aggregated	936.1694497	34235.46086	5778.319307	0	1.11380718
South Coast	2019 Annual	LHD1	GAS	Aggregated	Aggregated	298068.2456	12841775.97	4440772.75	958.5031947	0
South Coast	2019 Annual	LHD1	DSL	Aggregated	Aggregated	95374.92737	3971884.571	1199696.543	0	206.6551858
South Coast	2019 Annual	LHD2	GAS	Aggregated	Aggregated	31097.83692	1342551.252	463311.4087	100.4226809	0
South Coast	2019 Annual	LHD2	DSL	Aggregated	Aggregated	31667.65418	1297177.962	398339.2365	0	67.60480876
South Coast	2019 Annual	MCY	GAS	Aggregated	Aggregated	235655.0751	1732973.652	471263.0321	43.62008469	0
South Coast	2019 Annual	MDV	GAS	Aggregated	Aggregated	1631356.276	55057446.76	10099703.51	4179.679332	0
South Coast	2019 Annual	MDV	DSL	Aggregated	Aggregated	1652.158786	57048.36187	9962.735721	0	1.850255327
South Coast	2019 Annual	MH	GAS	Aggregated	Aggregated	64064.01307	721092.3204	6408.964033	50.39822302	0
South Coast	2019 Annual	MH	DSL	Aggregated	Aggregated	11230.19417	121591.3171	1123.019455	0	13.53856295
South Coast	2019 Annual	OBUS	GAS	Aggregated	Aggregated	7208.090363	274874.5137	329180.9538	21.94926184	0
South Coast	2019 Annual	OBUS	DSL	Aggregated	Aggregated	6197.512347	493501.237	0	0	72.06815995
South Coast	2019 Annual	SBUS	GAS	Aggregated	Aggregated	1597.522673	57413.09961	6390.09096	5.268394523	0
South Coast	2019 Annual	SBUS	DSL	Aggregated	Aggregated	4764.927635	173142.1179	0	0	24.02254814
South Coast	2019 Annual	T6	GAS	Aggregated	Aggregated	24737.45348	1188562.258	494946.9639	90.0300504	0
South Coast	2019 Annual	T6	DSL	Aggregated	Aggregated	87786.7306	5207499.59	0	0	581.1799736
South Coast	2019 Annual	T7	GAS	Aggregated	Aggregated	1671.755598	233432.5503	33448.48691	18.31152018	0
South Coast	2019 Annual	T7	DSL	Aggregated	Aggregated	84613.80894	12554426.8	0	0	2246.219196
South Coast	2019 Annual	UBUS	GAS	Aggregated	Aggregated	1871.286363	200931.7346	7485.1454	18.38053164	0
South Coast	2019 Annual	UBUS	DSL	Aggregated	Aggregated	7346.104821	787391.9987	29384.41867	0	195.1174575
2020										
South Coast	2020 Annual	LDA	GAS	Aggregated	Aggregated	5962902.655	203195464.1	37640937.19	8935.015097	0
South Coast	2020 Annual	LDA	DSL	Aggregated	Aggregated	20499.09535	657371.4659	125683.2458	0	21.18148712
South Coast	2020 Annual	LDT1	GAS	Aggregated	Aggregated	698686.0887	23776980.12	4227851.699	1207.517018	0
South Coast	2020 Annual	LDT1	DSL	Aggregated	Aggregated	1013.074458	34846.3438	5836.706215	0	1.145385874
South Coast	2020 Annual	LDT2	GAS	Aggregated	Aggregated	1980365.768	72336808.26	12463753.43	4307.469097	0
South Coast	2020 Annual	LDT2	DSL	Aggregated	Aggregated	945.7563911	34112.1222	5848.367695	0	1.108484107
South Coast	2020 Annual	LHD1	GAS	Aggregated	Aggregated	302687.518	13021681.34	4509592.851	971.1156929	0
South Coast	2020 Annual	LHD1	DSL	Aggregated	Aggregated	97218.34121	4040403.571	1222884.346	0	210.1159723
South Coast	2020 Annual	LHD2	GAS	Aggregated	Aggregated	31498.54275	1360186.091	469281.3373	101.6690386	0
South Coast	2020 Annual	LHD2	DSL	Aggregated	Aggregated	32171.83094	1314224.484	404681.1507	0	68.44997656
South Coast	2020 Annual	MCY	GAS	Aggregated	Aggregated	238648.8614	1755415.074	477250.0059	44.20212924	0
South Coast	2020 Annual	MDV	GAS	Aggregated	Aggregated	1649349.956	55656936.08	10194300.99	4224.440405	0
South Coast	2020 Annual	MDV	DSL	Aggregated	Aggregated	1668.976104	56812.72825	10064.25415	0	1.840924194
South Coast	2020 Annual	MH	GAS	Aggregated	Aggregated	64997.84856	731934.2498	6502.384735	51.06973866	0
South Coast	2020 Annual	MH	DSL	Aggregated	Aggregated	11405.20915	123378.2401	1140.520896	0	13.74368184
South Coast	2020 Annual	OBUS	GAS	Aggregated	Aggregated	7257.988354	274476.3978	331459.722	21.88778844	0
South Coast	2020 Annual	OBUS	DSL	Aggregated	Aggregated	6259.713659	502137.5086	0	0	73.15204402
South Coast	2020 Annual	SBUS	GAS	Aggregated	Aggregated	1618.359763	58152.92569	6473.43912	5.324545744	0
South Coast	2020 Annual	SBUS	DSL	Aggregated	Aggregated	4757.096872	172039.675	0	0	23.86169872
South Coast	2020 Annual	T6	GAS	Aggregated	Aggregated	25025.96255	1200686.595	500719.4495	90.69618593	0
South Coast	2020 Annual	T6	DSL	Aggregated	Aggregated	88451.07435	5274431.967	0	0	587.7982468
South Coast	2020 Annual	T7	GAS	Aggregated	Aggregated	1686.343163	230157.6992	33740.35566	18.05321743	0
South Coast	2020 Annual	T7	DSL	Aggregated	Aggregated	86280.48207	12834987.93	0	0	2295.958827
South Coast	2020 Annual	UBUS	GAS	Aggregated	Aggregated	1890.480037	202978.48	7561.919764	18.50339127	0
South Coast	2020 Annual	UBUS	DSL	Aggregated	Aggregated	7395.227709	792663.9494	29580.91072	0	195.4660731

2021										
South Coast	2021 Annual	LDA	GAS	Aggregated	Aggregated	5983324.082	203406334.5	37758497.7	8962.552247	0
South Coast	2021 Annual	LDA	DSL	Aggregated	Aggregated	20560.23313	653396.714	126492.476	0	21.01725148
South Coast	2021 Annual	LDT1	GAS	Aggregated	Aggregated	704120.7219	23959701.08	4257214.069	1219.237627	0
South Coast	2021 Annual	LDT1	DSL	Aggregated	Aggregated	1020.649142	34758.83358	5902.678211	0	1.140927592
South Coast	2021 Annual	LDT2	GAS	Aggregated	Aggregated	1998564.646	72973317.94	12574607.68	4353.005354	0
South Coast	2021 Annual	LDT2	DSL	Aggregated	Aggregated	954.6066242	33837.39521	5897.135388	0	1.098922828
South Coast	2021 Annual	LHD1	GAS	Aggregated	Aggregated	306736.8296	13172356.63	4569921.441	984.8986766	0
South Coast	2021 Annual	LHD1	DSL	Aggregated	Aggregated	98644.75865	4084184.142	1240826.916	0	212.3005495
South Coast	2021 Annual	LHD2	GAS	Aggregated	Aggregated	31916.63574	1380051.408	475510.3039	103.4048579	0
South Coast	2021 Annual	LHD2	DSL	Aggregated	Aggregated	32633.90884	1332547.957	410493.4861	0	69.35604242
South Coast	2021 Annual	MCY	GAS	Aggregated	Aggregated	238796.0461	1746303.041	477544.3157	44.04302905	0
South Coast	2021 Annual	MDV	GAS	Aggregated	Aggregated	1666722.553	56233095.91	10285785.78	4277.205001	0
South Coast	2021 Annual	MDV	DSL	Aggregated	Aggregated	1685.670696	57417.81391	10215.06382	0	1.856437771
South Coast	2021 Annual	MH	GAS	Aggregated	Aggregated	66982.0158	758744.7362	6700.880847	53.05277536	0
South Coast	2021 Annual	MH	DSL	Aggregated	Aggregated	11760.49394	128008.6648	1176.049409	0	14.2877918
South Coast	2021 Annual	OBUS	GAS	Aggregated	Aggregated	7310.315318	274984.626	333849.4021	21.94764195	0
South Coast	2021 Annual	OBUS	DSL	Aggregated	Aggregated	6316.408204	510924.915	0	0	74.24454754
South Coast	2021 Annual	SBUS	GAS	Aggregated	Aggregated	1639.463886	58906.75244	6557.855339	5.38281272	0
South Coast	2021 Annual	SBUS	DSL	Aggregated	Aggregated	4756.299456	171589.1691	0	0	23.78263689
South Coast	2021 Annual	T6	GAS	Aggregated	Aggregated	25351.76926	1213525.712	507238.1987	91.68377716	0
South Coast	2021 Annual	T6	DSL	Aggregated	Aggregated	88850.15221	5323590.354	0	0	592.7846956
South Coast	2021 Annual	T7	GAS	Aggregated	Aggregated	1715.483409	230951.3207	34323.39379	18.14702494	0
South Coast	2021 Annual	T7	DSL	Aggregated	Aggregated	87795.94699	13172387.8	0	0	2357.794852
South Coast	2021 Annual	UBUS	GAS	Aggregated	Aggregated	1912.833476	205370.7536	7651.333894	18.70519393	0
South Coast	2021 Annual	UBUS	DSL	Aggregated	Aggregated	7466.92761	800350.4525	29867.7091	0	196.6841245
2022										
South Coast	2022 Annual	LDA	GAS	Aggregated	Aggregated	6003986.271	203834624.8	37881273.8	8979.411325	0
South Coast	2022 Annual	LDA	DSL	Aggregated	Aggregated	20622.06713	649368.2394	127166.1971	0	20.85582752
South Coast	2022 Annual	LDT1	GAS	Aggregated	Aggregated	709614.2349	24148511.38	4288047.373	1228.456545	0
South Coast	2022 Annual	LDT1	DSL	Aggregated	Aggregated	1028.302445	34560.08884	5951.424084	0	1.133515574
South Coast	2022 Annual	LDT2	GAS	Aggregated	Aggregated	2016981.836	73608549.11	12686637.83	4389.113693	0
South Coast	2022 Annual	LDT2	DSL	Aggregated	Aggregated	963.5654104	33483.13064	5931.449389	0	1.086849083
South Coast	2022 Annual	LHD1	GAS	Aggregated	Aggregated	310844.3349	13343229.49	4631117.289	997.1949015	0
South Coast	2022 Annual	LHD1	DSL	Aggregated	Aggregated	100093.7971	4131147.145	1259054.063	0	214.6594683
South Coast	2022 Annual	LHD2	GAS	Aggregated	Aggregated	32340.58094	1398344.345	481826.4596	104.7360727	0
South Coast	2022 Annual	LHD2	DSL	Aggregated	Aggregated	33103.02662	1351476.331	416394.4155	0	70.29453498
South Coast	2022 Annual	MCY	GAS	Aggregated	Aggregated	238964.2021	1739170.208	477880.6011	43.8836917	0
South Coast	2022 Annual	MDV	GAS	Aggregated	Aggregated	1684327.208	56830183.05	10380104.35	4321.684926	0
South Coast	2022 Annual	MDV	DSL	Aggregated	Aggregated	1702.576007	58019.44574	10360.46126	0	1.871473798
South Coast	2022 Annual	MH	GAS	Aggregated	Aggregated	69028.85719	785143.0299	6905.646844	54.8442708	0
South Coast	2022 Annual	MH	DSL	Aggregated	Aggregated	12127.25397	132612.6833	1212.725419	0	14.81239463
South Coast	2022 Annual	OBUS	GAS	Aggregated	Aggregated	7363.340257	276236.5072	336270.9383	22.01661524	0
South Coast	2022 Annual	OBUS	DSL	Aggregated	Aggregated	6373.169651	519866.1011	0	0	75.36151746
South Coast	2022 Annual	SBUS	GAS	Aggregated	Aggregated	1660.897956	59672.34662	6643.591677	5.441562884	0
South Coast	2022 Annual	SBUS	DSL	Aggregated	Aggregated	4758.427774	170710.1667	0	0	23.66575478
South Coast	2022 Annual	T6	GAS	Aggregated	Aggregated	25681.97797	1227000.819	513845.0295	92.54559383	0
South Coast	2022 Annual	T6	DSL	Aggregated	Aggregated	89267.54277	5376141.722	0	0	597.9394541
South Coast	2022 Annual	T7	GAS	Aggregated	Aggregated	1745.315438	231605.8895	34920.27332	18.17487658	0
South Coast	2022 Annual	T7	DSL	Aggregated	Aggregated	89153.53404	13501381.84	0	0	2416.821803
South Coast	2022 Annual	UBUS	GAS	Aggregated	Aggregated	1935.503023	207796.6854	7742.012188	18.91540815	0
South Coast	2022 Annual	UBUS	DSL	Aggregated	Aggregated	7539.389122	808118.6601	30157.55558	0	198.2184055
2023										
South Coast	2023 Annual	LDA	GAS	Aggregated	Aggregated	6024892.361	204411014.4	38008859.74	9002.036428	0
South Coast	2023 Annual	LDA	DSL	Aggregated	Aggregated	20684.60914	646320.1766	127773.8366	0	20.73006586
South Coast	2023 Annual	LDT1	GAS	Aggregated	Aggregated	715167.4213	24337964.92	4319749.962	1237.610761	0
South Coast	2023 Annual	LDT1	DSL	Aggregated	Aggregated	1036.035548	34796.70649	6023.876415	0	1.138434427
South Coast	2023 Annual	LDT2	GAS	Aggregated	Aggregated	2035620.685	74239198.67	12799681.59	4425.023333	0
South Coast	2023 Annual	LDT2	DSL	Aggregated	Aggregated	972.6344587	33603.68082	5990.502324	0	1.088989354
South Coast	2023 Annual	LHD1	GAS	Aggregated	Aggregated	315010.9376	13517948.46	4693193.321	1009.835922	0
South Coast	2023 Annual	LHD1	DSL	Aggregated	Aggregated	101565.8457	4188125.922	1277570.495	0	217.5304908
South Coast	2023 Annual	LHD2	GAS	Aggregated	Aggregated	32770.46488	1419347.806	488231.0611	106.2709311	0
South Coast	2023 Annual	LHD2	DSL	Aggregated	Aggregated	33579.29637	1372552.393	422385.2794	0	71.35215871
South Coast	2023 Annual	MCY	GAS	Aggregated	Aggregated	239153.1822	1734033.754	478258.5204	43.76882045	0
South Coast	2023 Annual	MDV	GAS	Aggregated	Aggregated	1702167.983	57409939.72	10474808.6	4364.996216	0
South Coast	2023 Annual	MDV	DSL	Aggregated	Aggregated	1719.695187	59054.83179	10537.79162	0	1.90043029
South Coast	2023 Annual	MH	GAS	Aggregated	Aggregated	71140.42999	811525.4315	7116.889016	56.64261157	0
South Coast	2023 Annual	MH	DSL	Aggregated	Aggregated	12505.87205	137103.2736	1250.587255	0	15.32432397
South Coast	2023 Annual	OBUS	GAS	Aggregated	Aggregated	7417.068826	277728.9582	338724.6361	22.10989366	0
South Coast	2023 Annual	OBUS	DSL	Aggregated	Aggregated	6443.990244	528963.7578	0	0	76.50862765
South Coast	2023 Annual	SBUS	GAS	Aggregated	Aggregated	1682.667739	60449.88185	6730.670672	5.477044084	0
South Coast	2023 Annual	SBUS	DSL	Aggregated	Aggregated	4769.864906	170017.1666	0	0	23.57660606
South Coast	2023 Annual	T6	GAS	Aggregated	Aggregated	26016.6531	1241594.749	520541.1803	93.51361996	0
South Coast	2023 Annual	T6	DSL	Aggregated	Aggregated	89765.58738	5433341.595	0	0	603.1229424
South Coast	2023 Annual	T7	GAS	Aggregated	Aggregated	1775.859492	232631.6212	35531.39703	18.24136056	0
South Coast	2023 Annual	T7	DSL	Aggregated	Aggregated	90510.65503	13827379.84	0	0	2458.554022
South Coast	2023 Annual	UBUS	GAS	Aggregated	Aggregated	1958.493815	210256.8243	7833.975549	19.12637837	0
South Coast	2023 Annual	UBUS	DSL	Aggregated	Aggregated	7612.622418	815969.7767	30450.48903	0	199.7501056

2024										
South Coast	2024 Annual	LDA	GAS	Aggregated	Aggregated	6047838.238	205180457.1	38152875.45	9081.79546	0
South Coast	2024 Annual	LDA	DSL	Aggregated	Aggregated	20753.91101	645479.2953	128418.1174	0	20.68003278
South Coast	2024 Annual	LDT1	GAS	Aggregated	Aggregated	721465.3671	24572663.48	4356928.725	1255.799325	0
South Coast	2024 Annual	LDT1	DSL	Aggregated	Aggregated	1044.801365	35325.43116	6118.755587	0	1.151448919
South Coast	2024 Annual	LDT2	GAS	Aggregated	Aggregated	2054813.986	74892077.02	12916143.21	4486.21291	0
South Coast	2024 Annual	LDT2	DSL	Aggregated	Aggregated	981.9502563	33912.83607	6062.804398	0	1.096166507
South Coast	2024 Annual	LHD1	GAS	Aggregated	Aggregated	319112.7409	13692283.58	4754304.053	1031.956764	0
South Coast	2024 Annual	LHD1	DSL	Aggregated	Aggregated	102933.1075	4241263.66	1294768.989	0	220.2081488
South Coast	2024 Annual	LHD2	GAS	Aggregated	Aggregated	33204.51463	1439248.604	494697.7525	108.7400601	0
South Coast	2024 Annual	LHD2	DSL	Aggregated	Aggregated	34031.75635	1390277.197	428076.6688	0	72.24049074
South Coast	2024 Annual	MCY	GAS	Aggregated	Aggregated	239510.2538	1732357.174	478972.6138	43.72806069	0
South Coast	2024 Annual	MDV	GAS	Aggregated	Aggregated	1720734.199	58002703.04	10572672.92	4432.212602	0
South Coast	2024 Annual	MDV	DSL	Aggregated	Aggregated	1737.613588	59914.91183	10698.30221	0	1.923999287
South Coast	2024 Annual	MH	GAS	Aggregated	Aggregated	73188.19987	836065.6997	7321.747443	58.83062548	0
South Coast	2024 Annual	MH	DSL	Aggregated	Aggregated	12871.59129	141311.9208	1287.159153	0	15.853821558
South Coast	2024 Annual	OBUS	GAS	Aggregated	Aggregated	7457.545444	278860.7329	340573.1221	22.32908306	0
South Coast	2024 Annual	OBUS	DSL	Aggregated	Aggregated	6518.78601	538220.6236	0	0	77.98998155
South Coast	2024 Annual	SBUS	GAS	Aggregated	Aggregated	1703.23619	61185.99517	6812.944514	5.52995754	0
South Coast	2024 Annual	SBUS	DSL	Aggregated	Aggregated	4775.561369	169371.1107	0	0	23.48988825
South Coast	2024 Annual	T6	GAS	Aggregated	Aggregated	26353.95344	1256614.595	527289.8787	95.24435145	0
South Coast	2024 Annual	T6	DSL	Aggregated	Aggregated	90458.88264	5497771.961	0	0	611.9051505
South Coast	2024 Annual	T7	GAS	Aggregated	Aggregated	1801.533546	233422.7305	36045.08383	18.45610548	0
South Coast	2024 Annual	T7	DSL	Aggregated	Aggregated	91869.33275	14146702.72	0	0	2520.987951
South Coast	2024 Annual	UBUS	GAS	Aggregated	Aggregated	1979.123657	212477.2607	7916.494568	19.31509867	0
South Coast	2024 Annual	UBUS	DSL	Aggregated	Aggregated	7676.08277	822794.7858	30704.33092	0	201.0309179
2025										
South Coast	2025 Annual	LDA	GAS	Aggregated	Aggregated	6071060.684	205902409.4	38292310.38	9111.109818	0
South Coast	2025 Annual	LDA	DSL	Aggregated	Aggregated	20824.01743	645425.8768	128989.9195	0	20.65758718
South Coast	2025 Annual	LDT1	GAS	Aggregated	Aggregated	727841.4187	24800256.37	4394580.033	1266.913117	0
South Coast	2025 Annual	LDT1	DSL	Aggregated	Aggregated	1053.671344	36078.4157	6234.044252	0	1.171563938
South Coast	2025 Annual	LDT2	GAS	Aggregated	Aggregated	2074233.282	75543800.58	13032475.38	4523.847088	0
South Coast	2025 Annual	LDT2	DSL	Aggregated	Aggregated	991.3779331	34127.5637	6127.875631	0	1.101277945
South Coast	2025 Annual	LHD1	GAS	Aggregated	Aggregated	323270.5821	13864618.41	4816249.853	1044.719264	0
South Coast	2025 Annual	LHD1	DSL	Aggregated	Aggregated	104319.7618	4299963.974	1312211.259	0	223.1849953
South Coast	2025 Annual	LHD2	GAS	Aggregated	Aggregated	33644.57974	1460581.241	501254.0841	110.3347382	0
South Coast	2025 Annual	LHD2	DSL	Aggregated	Aggregated	34490.58919	1419749.324	433848.2121	0	73.74246796
South Coast	2025 Annual	MCY	GAS	Aggregated	Aggregated	239885.1128	1731655.111	479722.2407	43.71614475	0
South Coast	2025 Annual	MDV	GAS	Aggregated	Aggregated	1739544.198	58559254.91	10668746.73	4474.113627	0
South Coast	2025 Annual	MDV	DSL	Aggregated	Aggregated	1755.7551	60649.8279	10849.88439	0	1.945288903
South Coast	2025 Annual	MH	GAS	Aggregated	Aggregated	75295.75151	860676.901	7532.587066	60.53312102	0
South Coast	2025 Annual	MH	DSL	Aggregated	Aggregated	13248.16263	145717.0342	1324.816305	0	16.3589763
South Coast	2025 Annual	OBUS	GAS	Aggregated	Aggregated	7498.394755	280278.822	342438.6481	22.41915013	0
South Coast	2025 Annual	OBUS	DSL	Aggregated	Aggregated	6601.409728	547639.4845	0	0	79.35093715
South Coast	2025 Annual	SBUS	GAS	Aggregated	Aggregated	1724.081211	61931.96529	6896.324657	5.591068406	0
South Coast	2025 Annual	SBUS	DSL	Aggregated	Aggregated	4776.290589	168600.404	0	0	23.40373204
South Coast	2025 Annual	T6	GAS	Aggregated	Aggregated	26695.76086	1270280.635	534128.7959	96.19718166	0
South Coast	2025 Annual	T6	DSL	Aggregated	Aggregated	91293.98975	5560998.022	0	0	618.8923217
South Coast	2025 Annual	T7	GAS	Aggregated	Aggregated	1827.705537	235586.7155	36568.73013	18.6067846	0
South Coast	2025 Annual	T7	DSL	Aggregated	Aggregated	93287.80541	14465115.58	0	0	2577.463819
South Coast	2025 Annual	UBUS	GAS	Aggregated	Aggregated	2000.013016	214725.7263	8000.052069	19.45142627	0
South Coast	2025 Annual	UBUS	DSL	Aggregated	Aggregated	7740.136429	829683.7616	30960.54636	0	200.6921606

**Crossroads Hollywood Existing Operations
Los Angeles-South Coast County, Annual**

Land Use Details

<i>Land Uses</i>	<i>Size</i>	<i>Metric</i>	<i>Lot Acreage</i>	<i>Floor Surface Area</i>	<i>Population</i>
General Office Building	79	1000sqft	1	79,107	0
Parking Lot	344	Space	2	137,600	0
High Turnover (Sit Down Restaurant)	0.48	1000sqft	0.01	475	0
Apartments Low Rise	84	Dwelling Unit	4	66,301	240
Strip Mall	27	1000sqft	1	26,690	0

Trip Summary Information

<i>Land Uses</i>	<i>Average Daily Trip Rate</i>			<i>Mitigated</i>
	<i>Weekday</i>	<i>Saturday</i>	<i>Sunday</i>	<i>Annual VMT</i>
Apartments Low Rise	559	607	515	1,518,587
General Office Building	873	187	78	1,692,221
High Turnover (Sit Down Restaurant)	61	76	63	68,753
Parking Lot	0	0	0	0
Strip Mall	1,140	1,081	525	1,557,448
Total	2,631.87	1,951.78	1,180.99	4,837,009.00

Gasoline and Diesel Usage

	<i>Gasoline</i>	<i>Diesel</i>
<i>Miles/Gallon</i>	18.6	7.4
<i>% Fleet Mix</i>	93.4%	6.6%
Total (Gallons):	242,491	43,493

Energy by Land Use - Natural Gas

<i>Land Uses</i>	<i>kBTU/yr</i>	<i>cu ft/yr</i>
General Office Building	984,091	984,091
High Turnover (Sit Down Restaurant)	111,316	111,316
Parking Lot	0	0
Strip Mall	48,576	48,576
Apartmnets Low Rise	1,197,140	1,197,140
Total	2,341,123	2,341,123.00

Energy by Land Use - Electricity

<i>Land Uses</i>	<i>kWH/yr</i>
Apartments Low Rise	303,427
General Office Building	1,205,590
High Turnover (Sit Down Restaurant)	22,952
Parking Lot	121,088
Strip Mall	425,972
Total	2,079,029

Water Detail

<i>Land Uses</i>	<i>Indoor Use (Mgal)</i>	<i>Outdoor Use (Mgal)</i>	<i>Electricity Use (kWh/yr)</i>
	Apartments Low Rise	5	3
General Office Building	14	9	240,051
High Turnover (Sit Down Restaurant)	0	0	1,709
Parking Lot	0	0	0
Strip Mall	2	1	33,753
Total	21.66	13.29	369,884

Notes: Indoor water results in 0.0111 kWhr of electricity usage per gallon from delivery, treatment, and distribution of water within Southern California (CalEEMod). Outdoor water results in 0.009727 kWhr of electricity usage per gallon from delivery and distribution of water within Southern California (CalEEMod).

Crossroads Hollywood Project Operations NIERM
Los Angeles-South Coast County, Annual

Land Use Details

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	95	1000sqft	8	95000	0
Enclosed Parking with Elevator	2,494	Space	23.36	1223700	0
High Turnover (Sit Down Restaurant)	41.6	1000sqft	0	41600	0
Hotel	308	Room	0	348500	0
Quality Restaurant	41.6	1000sqft	0	41600	0
Apartments High Rise	760	Dwelling Unit	0	643200	2174
Condo/Townhouse High Rise	190	Dwelling Unit	0	160800	543
Strip Mall	61.8	1000sqft	0	61800	0
Supermarket	40	1000sqft	0	40000	0

Trip Summary Information

Land Uses	Average Daily Trip Rate			Unmitigated
	Weekday	Saturday	Sunday	Annual VMT
Apartments High Rise	5054	5494.8	4658	17292546
Condo/Townhouse High Rise	1103.9	1198.9	1016.5	3775904
Enclosed Parking with Elevator	0	0	0	0
General Office Building	1047.85	225.15	93.1	2557610
High Turnover (Sit Down Restaurant)	5289.44	6588.19	5484.54	7499449
Hotel	2516.36	2522.52	1832.6	5773484
Quality Restaurant	3741.92	3925.38	3001.86	5213914
Strip Mall	2638.86	2502.9	1216.22	4597057
Supermarket	4089.6	7103.6	6657.6	6448292
Total	25,481.93	29,561.44	23,960.42	53,158,256

Unmitigated Gasoline and Diesel Usage

	Gasoline	Diesel
Miles/Gallon	18.6	7.4
% Fleet Mix	93.4%	6.6%
Total (Gallons):	2,664,954	477,979

Energy by Land Use - Natural Gas (Unmitigated)

Land Uses	kBTU/yr	cu ft/yr
Condo/Townhouse High Rise	3271830	3116029
Enclosed Parking with Elevator	0	0
General Office Building	1038350	988905
High Turnover (Sit Down Restaurant)	9693220	9231638
Hotel	8719470	8304257
Quality Restaurant	9693220	9231638
Strip Mall	105060	100057
Supermarket	903600	860571
Apartments High Rise	5183050	4936238
Total	38,607,800	36,769,333

Energy by Land Use - Electricity (Unmitigated)

Land Uses	kWH/yr
Apartments High Rise	2,645,770
Condo/Townhouse High Rise	827,860
Enclosed Parking with Elevator	2,814,500
General Office Building	1,380,350
High Turnover (Sit Down Restaurant)	1,951,460
Hotel	2,962,250
Quality Restaurant	1,951,460
Strip Mall	937,506
Supermarket	1,566,800
Total	17,037,956

Water Detail (Unmitigated)

Land Uses	Indoor Use (Mgal)	Outdoor Use (Mgal)	Electricity Use (kWh/yr)
Apartments High Rise	49.52	31.22	853,835
Condo/Townhouse High Rise	12.38	7.80	213,459
Enclosed Parking with Elevator	0.00	0.00	0
General Office Building	16.88	10.35	288,268
High Turnover (Sit Down Restaurant)	12.63	0.81	148,138
Hotel	7.81	0.87	95,254
Quality Restaurant	12.63	0.81	148,138
Strip Mall	4.58	2.81	78,153
Supermarket	4.93	0.15	56,269
Total	121.36	54.81	1881514.73

Notes: Indoor water results in 0.0111 kWhr of electricity usage per gallon from delivery, treatment, and distribution of water within Southern California (CalEEMod). Outdoor water results in 0.009727 kWhr of electricity usage per gallon from delivery and distribution of water within Southern California (CalEEMod).

**Crossroads Hollywood Project Operations
Los Angeles-South Coast County, Annual**

Land Use Details

<i>Land Uses</i>	<i>Size</i>	<i>Metric</i>	<i>Lot Acreage</i>	<i>Floor Surface Area</i>	<i>Population</i>
General Office Building	95	1000sqft	8	95000	0
Enclosed Parking with Elevator	2,494	Space	0	1223700	0
High Turnover (Sit Down Restaurant)	41.6	1000sqft	0	41600	0
Hotel	308	Room	0	348500	0
Quality Restaurant	41.6	1000sqft	0	41600	0
Apartments High Rise	760	Dwelling Unit	0	643200	2174
Condo/Townhouse High Rise	190	Dwelling Unit	0	160800	543
Strip Mall	61.8	1000sqft	0	61800	0
Supermarket	40	1000sqft	0	40000	0

Trip Summary Information

<i>Land Uses</i>	<i>Average Daily Trip Rate</i>			<i>Mitigated</i>
	<i>Weekday</i>	<i>Saturday</i>	<i>Sunday</i>	<i>Annual VMT</i>
Apartments High Rise	5054	5494.8	4658.8	9,496,182
Condo/Townhouse High Rise	1103.9	1198.9	1016.5	2,073,533
Enclosed Parking with Elevator	0	0	0	0
General Office Building	1047.85	225.15	93.1	1,404,509
High Turnover (Sit Down Restaurant)	5289.44	6588.19	5484.54	4,118,314
Hotel	2516.36	2522.52	1832.6	3,170,502
Quality Restaurant	3741.92	3925.38	3001.86	2,863,215
Strip Mall	2638.86	2502.9	1216.22	2,524,469
Supermarket	4089.6	7103.6	6657.6	3,541,072
Total	25,481.93	29,561.44	23,961.22	29,191,796

Mitigated Gasoline and Diesel Usage

	<i>Gasoline</i>	<i>Diesel</i>
<i>Miles/Gallon</i>	18.6	7.4
<i>% Fleet Mix</i>	93.4%	6.6%
Total (Gallons):	1,463,456	262,481

Energy by Land Use - Natural Gas (Mitigated)

<i>Land Uses</i>	<i>kBTU/yr</i>	<i>cu ft/yr</i>
Condo/Townhouse High Rise	2,295,620	2,186,305
Enclosed Parking with Elevator	0	0
General Office Building	632,985	602,843
High Turnover (Sit Down Restaurant)	8,931,150	8,505,857
Hotel	5,760,530	5,486,219
Quality Restaurant	8,931,150	8,505,857
Strip Mall	74,933	71,364
Supermarket	736,100	701,048
Apartments High Rise	3,762,070	3,582,924
Total	31,124,538	29,642,417

Energy by Land Use - Electricity (Mitigated)

<i>Land Uses</i>	<i>kWH/yr</i>
Apartments High Rise	2,335,720
Condo/Townhouse High Rise	726,382
Enclosed Parking with Elevator	2,786,980
General Office Building	1,022,770
High Turnover (Sit Down Restaurant)	1,674,980
Hotel	2,213,320
Quality Restaurant	1,607,780
Strip Mall	693,489
Supermarket	1,257,560
Minus Solar Power	-188,000
Total	14,130,981

Water Detail (Mitigated)

<i>Land Uses</i>	<i>Indoor Use (Mgal)</i>	<i>Outdoor Use (Mgal)</i>	<i>Electricity Use (kWh/yr)</i>
Apartments High Rise	32.19	15.61	509,445
Condo/Townhouse High Rise	8.05	3.90	127,361
Enclosed Parking with Elevator	0.00	0.00	0
General Office Building	10.98	5.17	172,275
High Turnover (Sit Down Restaurant)	8.21	0.40	95,114
Hotel	5.08	0.43	60,648
Quality Restaurant	8.21	0.40	95,114
Strip Mall	2.98	1.40	46,706
Supermarket	3.20	0.08	36,352
Total	78.88	27.40	1,143,016

Notes: Indoor water results in 0.0111 kWh of electricity usage per gallon from delivery, treatment, and distribution of water within Southern California (CalEEMod). Outdoor water results in 0.009727 kWh of electricity usage per gallon from delivery and distribution of water within Southern California (CalEEMod).

EMFAC Emission inventories for County

EMFAC2011 Emissions Inventory

Region Type: County

Region: Los Angeles

Calendar Year: 2015

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Region	CalYr	Season	Veh_Class	Fuel	MdlYr	Speed (miles/hr)	Fuel_GAS (1000 gallons/day)	Fuel_DSL (1000 gallons/day)
Los Angele	2015	Annual	LDA	DSL	Aggregate	Aggregate	0	13.74963907
Los Angele	2015	Annual	LDT1	DSL	Aggregate	Aggregate	0	0.655910747
Los Angele	2015	Annual	LDT2	DSL	Aggregate	Aggregate	0	0.64410433
Los Angele	2015	Annual	LHD1	DSL	Aggregate	Aggregate	0	99.07222584
Los Angele	2015	Annual	LHD2	DSL	Aggregate	Aggregate	0	36.34378447
Los Angele	2015	Annual	MDV	DSL	Aggregate	Aggregate	0	1.083062901
Los Angele	2015	Annual	MH	DSL	Aggregate	Aggregate	0	5.959769312
Los Angele	2015	Annual	Motor Coa	DSL	Aggregate	Aggregate	0	31.61820588
Los Angele	2015	Annual	PTO	DSL	Aggregate	Aggregate	0	26.74978596
Los Angele	2015	Annual	SBUS	DSL	Aggregate	Aggregate	0	13.75340467
Los Angele	2015	Annual	T6 Ag	DSL	Aggregate	Aggregate	0	0.52057854
Los Angele	2015	Annual	T6 Public	DSL	Aggregate	Aggregate	0	8.023688544
Los Angele	2015	Annual	T6 CAIRP h	DSL	Aggregate	Aggregate	0	0.288482122
Los Angele	2015	Annual	T6 CAIRP si	DSL	Aggregate	Aggregate	0	0.934265256
Los Angele	2015	Annual	T6 OOS he	DSL	Aggregate	Aggregate	0	0.165392815
Los Angele	2015	Annual	T6 OOS sm	DSL	Aggregate	Aggregate	0	0.535633751
Los Angele	2015	Annual	T6 instate r	DSL	Aggregate	Aggregate	0	14.2872765
Los Angele	2015	Annual	T6 instate r	DSL	Aggregate	Aggregate	0	36.30728018
Los Angele	2015	Annual	T6 instate l	DSL	Aggregate	Aggregate	0	71.62311413
Los Angele	2015	Annual	T6 instate s	DSL	Aggregate	Aggregate	0	189.6994852
Los Angele	2015	Annual	T6 utility	DSL	Aggregate	Aggregate	0	1.453320676
Los Angele	2015	Annual	T7 Ag	DSL	Aggregate	Aggregate	0	1.92466908
Los Angele	2015	Annual	T7 CAIRP	DSL	Aggregate	Aggregate	0	188.0429496
Los Angele	2015	Annual	T7 CAIRP c	DSL	Aggregate	Aggregate	0	15.54107701
Los Angele	2015	Annual	T7 NNOOS	DSL	Aggregate	Aggregate	0	212.759045
Los Angele	2015	Annual	T7 NOOS	DSL	Aggregate	Aggregate	0	69.36320544
Los Angele	2015	Annual	T7 other pr	DSL	Aggregate	Aggregate	0	0
Los Angele	2015	Annual	T7 POAK	DSL	Aggregate	Aggregate	0	0
Los Angele	2015	Annual	T7 POLA	DSL	Aggregate	Aggregate	0	222.8030633
Los Angele	2015	Annual	T7 Public	DSL	Aggregate	Aggregate	0	13.27600093
Los Angele	2015	Annual	T7 Single	DSL	Aggregate	Aggregate	0	92.58545632
Los Angele	2015	Annual	T7 single cr	DSL	Aggregate	Aggregate	0	38.96406672
Los Angele	2015	Annual	T7 SWCV	DSL	Aggregate	Aggregate	0	33.12457633
Los Angele	2015	Annual	T7 tractor	DSL	Aggregate	Aggregate	0	242.7107212
Los Angele	2015	Annual	T7 tractor r	DSL	Aggregate	Aggregate	0	29.11232273
Los Angele	2015	Annual	T7 utility	DSL	Aggregate	Aggregate	0	1.541169739
Los Angele	2015	Annual	UBUS	DSL	Aggregate	Aggregate	0	154.461319
Los Angele	2015	Annual	All Other B	DSL	Aggregate	Aggregate	0	19.5616043
Los Angele	2015	Annual	LDA	GAS	Aggregate	Aggregate	5640.479932	0
Los Angele	2015	Annual	LDT1	GAS	Aggregate	Aggregate	732.8389451	0
Los Angele	2015	Annual	LDT2	GAS	Aggregate	Aggregate	2573.735462	0
Los Angele	2015	Annual	LHD1	GAS	Aggregate	Aggregate	589.0810037	0
Los Angele	2015	Annual	LHD2	GAS	Aggregate	Aggregate	64.77310387	0
Los Angele	2015	Annual	MCY	GAS	Aggregate	Aggregate	23.12776109	0
Los Angele	2015	Annual	MDV	GAS	Aggregate	Aggregate	2365.374044	0
Los Angele	2015	Annual	MH	GAS	Aggregate	Aggregate	28.73862359	0
Los Angele	2015	Annual	OBUS	GAS	Aggregate	Aggregate	16.80147708	0
Los Angele	2015	Annual	SBUS	GAS	Aggregate	Aggregate	2.927842002	0
Los Angele	2015	Annual	T6TS	GAS	Aggregate	Aggregate	59.77175767	0
Los Angele	2015	Annual	T7IS	GAS	Aggregate	Aggregate	13.60128661	0
Los Angele	2015	Annual	UBUS	GAS	Aggregate	Aggregate	9.709125568	0
Total							4,424,150,533	689,572,475
Fuel Usage for Project Construction							290,256.96	494,117.68
Percentage of County for Construction							0.007%	0.07%
Net Fuel Usage for Project Operation							1,220,965	218,989
Percentage of County for Operation							0.03%	0.03%

Appendix R.2

Energy Systems Infrastructure Study

Energy Systems Infrastructure Study

6701 Sunset Blvd Los Angeles, Hollywood CA

Prepared by

**Rod Litchfield Associate, PE,
Senior Energy Project Manager**



**David Evans and Associates, Inc.
2100 SW River Parkway
Portland, OR 97201**

DEA Project Number: CREH0000-0001-009

Updated 05-19-2016

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1 EXISTING CONDITIONS

Based on available drawings the existing buildings in the affected area are fed from relatively low capacity overhead electric distribution lines with various communications underbuilt cabling. The existing overhead distribution lines in the project area are shown in red on Figure 1. Gas lines are generally 2” and 3” lines feeding the existing buildings (see Figure 2). The capacity of the overhead power lines and gas services are sized consistent with light commercial and residential requirements.

Figure 1: Location of Existing Overhead Electric Distribution Lines

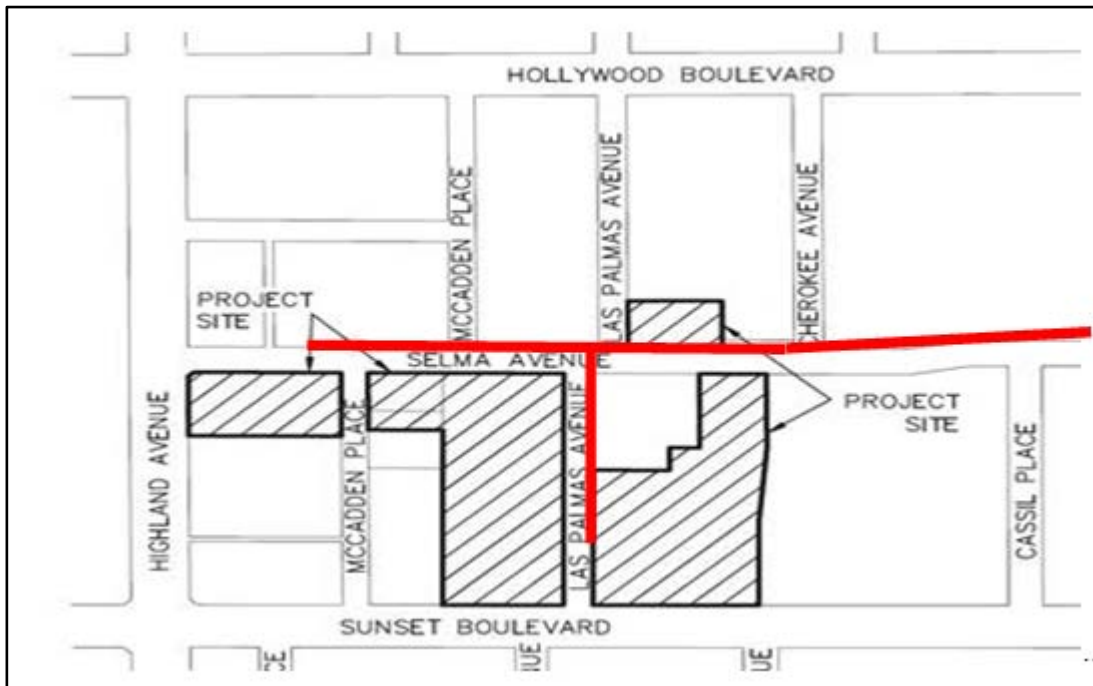


Figure 2: Location of Existing Underground Natural Gas Lines



Both the existing gas and electric lines will not be of sufficient capacity to provide service to the new buildings planned in the development.

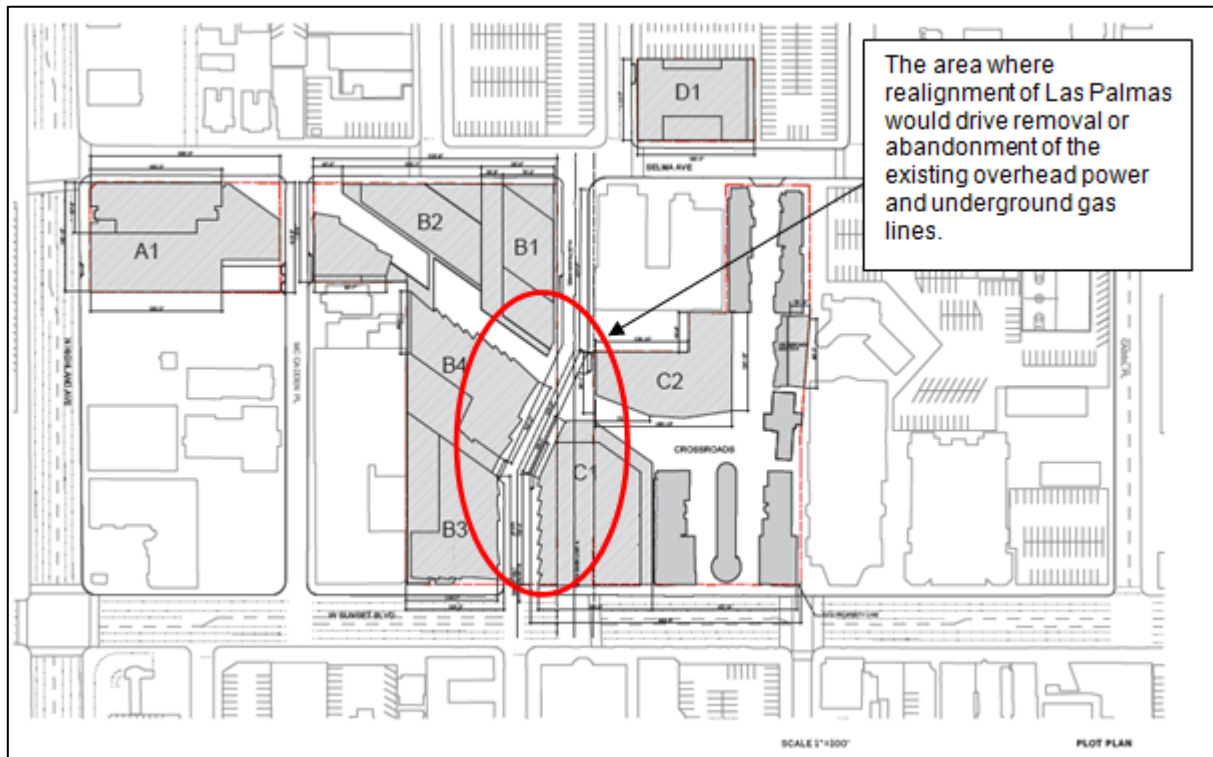
2 SYSTEM IMPACTS AND SIGNIFICANT THRESHOLDS

Since the existing buildings south of the First Baptist Church are to be demolished, the existing overhead electric distribution lines and communications under build will no longer be needed, and removed during the early stages of the construction project. The realignment of the section of Las Palmas north of Sunset Blvd will require SoCal Gas to remove the 2" underground gas lines currently on the east side of the street.

Due to the different building types and customers, there are estimated to be nine different serve points for gas and electric service. Using the preliminary load information provided in this report (see Table 1 in Section IV) and the Will Serve letters, the design engineers and utility engineers will determine the size, location, and number of service feeds to each building. It is anticipated that Los Angeles Department of Water and Power (LADWP) will be replacing the overhead distribution feeders with an underground duct bank/manhole system. LADWP and Southern California Gas Company (SoCalGas) will coordinate their construction activities to minimize the disruption to the area.

LADWP and SoCalGas have sufficient electrical and natural gas resources in the area to feed the project requirements. No significant energy related thresholds have been identified.

Figure 3: Las Palmas Road Re-alignment



3 PROJECT IMPACTS DURING CONSTRUCTION

The new development will ultimately require removal or relocation of some of the overhead electric distribution lines, communications cabling, and underground gas lines, especially along Las Palmas Avenue between West Sunset Blvd and Selma Ave where the street will be realigned.

The construction company may want to work with LADWP to use the overhead lines along the northern section of Las Palmas to provide construction power to the site. Construction Power for the northern parts of the project can be taken from the overhead distribution lines on the north side of Selma Avenue. The project's electrical engineer will need to work with LADWP to determine the exact locations of temporary power for construction.

Minimal natural gas is expected to be needed during construction.

4 FINAL CONDITION

Approximate electric loads for each of the planned building types and customers are provided in Table 1. The data provided is based on information available at the time, using several sources of industry standard information. More exact electric load calculations will be determined using the National Electric Code section 220, the California Environmental Quality Act Guidelines or other applicable energy design requirements. Summarily, the size and number of gas feeds for the project will be calculated when more information is known. The Total Estimated Demand has a 25% factor to accommodate future growth. The suggested transformer size is based on readily available commercial grade oil or dry type transformers.

Table 1: Power Summary by Service Point

Service Point	Building	Type	Ft ²	Comments/ Reference Data	Service Voltage	Total Estimated Demand Load (kVA)	Suggested Commercial XFMR Size (kVA)	Distribution Center Size (Amps)
1	A1	Hotel	348,363	308 rooms	480Y/277, 3Ø, 4w	1,062	1,500	2,000
		Retail	10,205					
		Restaurants	3,037					
2	B1	Condos	218,617	190 Condos (NEC 220.12)	480Y/277, 3Ø, 4w	394	500	800
		Retail	15,402					
3	B2	Apts	52,371	70 Rentals	480Y/277, 3Ø, 4w	77	100	200
		Retail	1,139					
4	B3	Apts	357,976	489 Rentals	480Y/277, 3Ø, 4w	546	750	1,000
		Retail	10,937					
5	B4	Apts	113,686	123 Rentals	480Y/277, 3Ø, 4w	286	350	600
		Retail	19,814					
6	C1	Office	49,136		480Y/277, 3Ø, 4w	1,146	1,500	2,000
		Retail	23,594					
7	C2	Office	43,825		480Y/277, 3Ø, 4w	988	1,250	1,600
		Retail	16,188					
8	CrossRoads	Retail	68,000		480Y/277, 3Ø, 4w	470	750	1,000
9	D1	Apts	60,302	78 Rentals	480Y/277, 3Ø, 4w	109	150	200
		Retail	4,336					
Total						5,079		

5 SUMMARY

The project will trigger substantial upgrades to both the natural gas and electrical loads in the area over what the existing infrastructure is capable of serving. Demolition and removal of overhead electrical distribution poles, communication lines and underground gas lines are anticipated, but are relatively minor in impact to the surrounding area and unaffected customers. Construction power is readily available from several sources. LADWP and SoCal Gas have been consulted and their input has been incorporated into this report. Based on the analysis contained in this report, no significant energy impacts have been identified.

Los Angeles



Department of Water & Power

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BARBARA E. MOSCHOS, *Secretary*

MARCIE L. EDWARDS
General Manager

May 24, 2016

Mr. Jonathan Tapia, E.I.T.
25152 Springfield Court, Suite 350
Santa Clarita, CA 91355-1096

Subject: The Crossroads of the World
Sunset Blvd, Highland Ave, Selma Ave and Cassil Place

Dear Mr. Tapia:

This is in response to your submittal regarding electric service for the proposed project located at the above address.

Electric Service is available and will be provided in accordance with the Los Angeles Department of Water and Power's (Department) Rules Governing Water and Electric Service. The availability of electricity is dependent upon adequate generating capacity and adequate fuel supplies. The estimated power requirement for this proposed project is part of the total load growth forecast for the City of Los Angeles and has been taken into account in the planned growth of the City's power system.

If you have any questions regarding this matter, please contact our design engineer Mr. Vincent G. Zabukovec, at telephone number (213) 367- 2725.

Sincerely,

A handwritten signature in black ink, appearing to read 'V. Zabukovec', is written over a light blue horizontal line.

VINCENT G. ZABUKOVEC
Engineer of Customer Station Design

VGZ:sl

C/enc:
ENGR: Mr. Vincent G. Zabukovec
FileNet

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111 N. Hope Street, Los Angeles, California 90012-2607 Mailing address: Box 51111, Los Angeles, CA 90051-5700
Telephone: (213) 367-4211 www.LADWP.com