Santa Clara City Power

“Preliminary” 2016 Impact Fee Study Prepared for City Council Workshop

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Summary of Updates

1. Assumed Residential customer growth rate was lowered to 80 customers per year, which in turn resulted in a lower NCP demand used to calculate the Base Impact Fee.
2. The assumed Utilization Factor for Residential and Commercial was increased to 15.0% and 17.5%, respectively.
3. The recently completed Paul Grimshaw Substation was removed from the IFA.

Summary of Updates (cont.)

4. The balance remaining in the Impact Fee Fund was changed to $450,000.
5. The amount to be recovered for the new City Hall and Administration Building was changed to $205,290.
6. All 100A panel sizes were removed from the fee calculations.

Impact Fees - General

1. Used by government agencies to fund certain capital projects associated with “new” development.
2. Cost-causal relationship must be established between the capital project(s) and the new development to which the impact fee will be charged.
3. Not intended to recover annual operating expenses or capital expenditures to correct existing deficiencies.

Impact Fees - Utah

1. Impact Fees governed by state statute: U.C.A. 1953 § 11-36a-102.
2. Requires that each political subdivision imposing an Impact Fee:
   a. Prepare an Impact Fee Facilities Plan (“IFFP”);
   b. Perform an Impact Fee Analysis (“IFA”);
   c. Calculate the Impact Fee; and
   d. Certify the IFFP and IFA.

Impact Fees – Utah (cont.)

3. The IFFP shall identify:
   a. The demands placed upon existing facilities by the new development; and
   b. The proposed means by which the political subdivision will meet those demands.
4. The IFA provides that:
   a. Each political subdivision shall prepare a written analysis of each impact fee imposed; and
   b. Prepare a summary of the IFA designed to be understood by a lay person.

Impact Fee Facilities Plan

1. Based largely on the CFP completed in August 2015.
2. Relied on certain Level of Service Standards used for distribution system planning:
   a. Transformer ratings under various loading criteria;
   b. Single contingency (N-1) emergency situations;
   c. Distribution circuit loading criteria;
   d. Primary circuit voltage drop; and
   e. Distribution circuit reinforcement.

Impact Fee Facilities Plan

3. Relied primarily on a five-year planning / forecast period (2016 – 2020).
4. Demands placed on existing facilities were estimated over the period 2016 - 2035:

Description	2016 1 Year	2018 3 Year	2021 6 Year	2025 10 Year	2035 20 Year
Total System CP Demands (kW) *	14,900.0	15,965.0	17,615.1	19,825.9	25,378.8
Total System NCP Demands (kW)**	16,828.8	18,149.6	20,130.8	22,772.4	29,376.4

* Measured at the input to the distribution system.

** Measured at the meter.

Impact Fee Facilities Plan

5. Major assumptions underlying load forecast.
   a. Customer growth assumes about 80 residential connections and 10 commercial connections are added each year – reflective of recent historical trends.
   b. Growth in kWh usage per current customer expected to be nil.
   c. Non-coincident peak load factors: Residential = 25.0%; Commercial and Agriculture = 30.0%.
   d. Average system load factor = just above 30%.

Impact Fee Facilities Plan

6. New Capital Projects and Costs (2017 – 2020):

Item and Description	Project Cost
2017	
1. 750 URD circuit #4 from Paul Grimshaw Substation to Rachel. w/ two PME	$246,000
2. Overcurrent Protection Coordination Review.	$30,750
2018/2019	
1. Extend 69kV transmission, with 15kV under build to South Hills development area (0.75 miles) and interconnect underbuilt to URD circuit.	$285,376
2. 750 URD circuit - Hamblin to Rachel along North Town, w/ two PME switchgear.	$234,762
3. 750 URD circuit – Claude to Arrowhead, w/three PME.	$405,988
2020	
1. Capacitor Bank (s) Installation	$38,633
2. 1-2MW Generator Addition	$2,759,532
2015 to 2020 Total Estimate	**$4,001,042**

Impact Fee Facilities Plan

7. Estimated Schedule of Expenditures (New Projects):

Year	Annual Expenditures	Percent of Total	Cumulative Expenditures	Percent of Total
2017	276,750	6.9%	276,750	6.9%
2018/2019	926,126	23.1%	1,202,876	30.0%
2020	2,798,165	70.0%	$4,001,042	100.0%
Total	***$4,001,042***	***100.0%***		

Notes:

All new capital projects are assumed to be 100% growth related.

Does not include interest on projects funded through bond issues.

Impact Fee Analysis

1. Three adjustments were made to the project costs shown above for:
   a. Interest on debt for bonded projects (i.e., 2 MW generator).
   b. Power Department's share of the remaining debt service on the new administration building.
   c. Balance of unused Impact Fee revenues existing as of fiscal year-end 2015.

Impact Fee Analysis

2. All projects except the 2 MW generator and Admin Building were assumed to be recovered over a 5-year period. The 2 MW generator and Admin Building used a 20-year recovery period.
3. Used Non-coincident Peak Demand as the denominator in the calculation.

   (Total Project Cost ÷ Increase in NCP = Base Impact Fee)

Impact Fee Analysis

4. Assumed a Panel Utilization Factor of 15.0% for Residential and 17.5% for Commercial.
5. Assumed a Power Factor of 90% for Residential and 85% for Commercial.

Base Impact Fee Analysis

Line No.	Description		5-year Recovery Period 2016-2020	20-Year Recovery Period 2016-2035	Totals
			(a)	(b)	(c)
	Curent and Future Projects				
1	Direct Recovery Projects	$	1,241,509		1,241,509
2	Bonded Projects	$		2,759,532	2,759,532
3	Add: Project Financing Costs	$		1,610,426	1,610,426
4	Sub-Total Current and Future Projects	$	1,241,509	4,369,958	5,611,467
5	**Add: Unrecovered Historical Growth-related Projects**	$		205,290	205,290
6	**Less: Balance of Unused Impact Fee Funds**	$	450,000		450,000
7	**Net Project Costs to be Recovered Through Impact Fees**	$	791,509	4,575,248	5,366,757
	Increase in NCP Demand at Meter				
11	Residential	kW	2,624.8	10,499.2	
12	Commecial	kW	677.2	2,708.8	
13	Total	kW	3,302.0	13,208.0	
14	**Base Impact Fee at Various Recovery Levels**	$/kW	239.71	346.40	586.11

Impact Fee Charges - Proposed

Line No.	Description / Panel Rating	Current Impact Fees	Proposed Impact Fees
		(a)	(b)
1	***Base Impact Fee ($ per kW)***	*$ 773.00*	*$ 586.11*
	Assumed Panel Utilization		
2	Residential		*15.0%*
3	Commercial		*17.5%*
	Assumed Power Factor		
4	Residential		*90%*
5	Commercial		*85%*
	Impact Fee Charge for Applicable Panel Size		
	Residential (120/240, 1 phase)		
6	200 Amp	4,739	3,798
7	400 Amp	5,529	7,596
	Commercial (120/240, 1 phase)		
8	200 Amp	3,339	4,185
9	400 Amp	6,679	8,370
10	600 Amp	10,018	12,554
	Commercial (120/208, 3 phase)		
11	200 Amp	5,013	6,282
12	400 Amp	10,025	12,563
13	600 Amp	15,038	18,845
	Commercial (277/480, 3 phase)		
14	200 Amp	11,568	14,496
15	400 Amp	23,123	28,992
16	800 Amp	46,270	57,985
17	1200 Amp	69,405	86,977

Impact Fee Comparison

Line No.	Description / Panel Rating	Santa Clara City		Other Municipals & Co-ops				
		Current Fees	Proposed Fees	St. George	Hurricane	Washington City	Dixie Power	Average
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Residential (120/240, 1 phase)							
1	200 Amp	4,739	3,798	4,504	1,844	2,449	3,950	3,187
2	400 Amp	5,529	7,596	7,721	1,844	4,897	6,900	5,341
	Commercial (120/240, 1 phase)							
3	200 Amp	3,339	4,185	6,115		4,625	3,950	4,897
4	400 Amp	6,679	8,370	12,230		9,250	7,900	9,793
5	600 Amp	10,018	12,554	N/A		13,876		13,876
	Commercial (120/208, 3 phase)							
6	200 Amp	5,013	6,282	12,239		6,943	15,386	11,523
7	400 Amp	10,025	12,563	24,479		13,885	27,354	21,906
8	600 Amp	15,038	18,845	N/A		20,828	41,031	30,930
	Commercial (277/480, 3 phase)							
9	200 Amp	11,568	14,496	28,245		16,022	N/A	22,134
10	400 Amp	23,123	28,992	56,490		32,043	N/A	44,267
11	800 Amp	46,270	57,985	112,980		64,086	N/A	88,533
12	1200 Amp	69,405	86,977	169,469		96,130	82,061	115,887

Observations / Recommendations

1. Current ratepayers may receive some benefit (e.g., improved system reliability) from the Impact Fee projects.
2. The proposed Impact Fee should consider the economic development goals of Santa Clara and Washington County in general.
3. The proposed fees are comparable to other Washington County Utilities and in most cases below the average.

Welcome to the
Santa Clara
Historical District

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