NEW OUC-COVB PPA, SUMMARY OF ESTIMATED COSTS & BENEFITS TO OUC & VERO BEACH
(PREPARED BY SCHEF WRIGHT & BILL HERRINGTON)

PPA PROVISION	ESTIMATED IMPACTS ON OUC	ESTIMATED IMPACTS ON VERO BEACH
Lower Base Demand and Energy Charges/Costs	2016-2023: - $49.4MM (Existing PPA Demand Charges – New PPA Demand Charges) 2024-2029: Estimate - $43.2MM (Existing PPA – Estimated Market Value of Capacity0. Potential additional OUC benefits through avoided future capacity costs. Assume that energy costs and revenues are a wash to OUC.	Demand/Capacity Charge Savings: 2016-2023: $139.2MM - $89.8MM = $49.4MM 2024-2029: $113.7MM - $70.5MM = $43.2MM
Shorter PPA Term	2024-2029: - $43.2MM gross estimate based on Existing PPA rates minus estimated market rates in 2024-2029; may have additional benefits to OUC through avoided need to add capacity in the 2023-2026 period, which also mitigates risks associated with Clean Power Plan impacts on OUC's Stanton units.	Difference in Estimated Total BPS Costs, 2024-2029 = $491.5MM – $382.9MM = $108.6MM Energy Cost Savings: 2024-2029: $147.9MM - $129.3MM = $ 18.6MM
Base Capacity Billing Demand Floor	Depends on whether it occurs. OUC benefit is that it gets the full value that it expected to get from agreeing to lower base demand charges for base capacity.	Depends on whether it occurs. Vero cost impact as compared to the Demand/Capacity Charges in the New PPA is higher demand rates and costs than if there were no floor. See attached table showing impacts at different MW impacts for 2018.
Capacity Deficiency Provisions	Unlikely to apply; see note in adjacent City column. OUC's potential benefits include additional capacity charge revenues IF OUC is able to serve capacity deficiency MW with OUC resources. Otherwise, if OUC serves Vero's capacity deficiency with purchased power, then	Unlikely to apply: the City would have been Capacity Deficient, compared to the 2016 threshold of 191 MW, in one month since January 2010, and that month was January 2010. The deficiency then would have been 7 MW. See table of historic City peak demands. This

	Vero pays the actual cost and OUC is able to use its resources to serve its native customers, presumably at lower cost to those customers.	provision enabled the City to obtain the option to reduce its peak demand (input value to determining billing demand) by 10 MW, which is worth approximately $1.3MM in 2016, and variable amounts from 2017-2023, depending on demand charges in the given year; total benefit to City is probably $9-10MM.
Peaking Sale/Purchase	Additional capacity revenues from City of $37.8MM nominal over the period 2016-2023. Energy costs and revenues should be a wash to OUC.	Additional total costs for peaking capacity and energy purchased from OUC estimated at $42.6MM (nominal) over the 2016-2023 PPA term. City is estimated to save a net of approx. $6MM (nominal) in net avoided/reduced Big Blue costs minus the costs of peaking capacity and energy from OUC over the term.
Change in Law	Additional risk to OUC of losing the full benefit of the New PPA if the City is adversely affected by a major Change in Law and the City is unable to obtain full stranded cost recovery. OUC gets the benefit that the City must pursue meritorious challenges to any such adverse Change in Law.	Benefits City by allowing City to avoid having to pay for peaking capacity and potentially some base capacity in the event that a Change in Law adversely affects the City and the City is unable to obtain full stranded cost recovery. City has to pay litigation costs, which could (or might not) be substantial.
Force Majeure	The force majeure provision is now bilateral, whereas under the Existing PPA only OUC may invoke a force majeure. The new provision represents a slight detriment to OUC in that, with the City now being able to invoke force majeure, OUC may not recover as much under the PPA as it could under the Existing PPA. The hypothetical scenario is that Vero could suffer a force majeure (other than a Change in Law) so dramatic that it was unable to perform under the PPA.	The force majeure provision is now bilateral. This represents a slight benefit to Vero Beach in that, with the City now being able to invoke force majeure, the City may be able to avoid full liability under the PPA if the City were to suffer a force majeure (other than a Change in Law) so dramatic that it was unable to perform under the PPA.

Avoided Litigation Costs	Potentially significant, in the extreme scenario in which OUC were to sue Vero and Vero were to counter-sue OUC. It's possible that full-blown litigation costs, with appeals, from any such litigation war, could be on the order of $2-4MM.	Potentially significant, in the extreme scenario in which OUC were to sue Vero and Vero were to counter-sue OUC. It's possible that full-blown litigation costs, with appeals, from any such litigation war, could be on the order of $2-4MM.
FGT Contracts	OUC gets to keep the City's FGT gas transportation rights permanently. The estimated NPV value to OUC per PA Consulting study in July 2012 was $10.8MM for the period 2012-2030. Since OUC already has the rights, under the Existing PPA, until 12/31/2029, the NPV value of the permanent release provision in the New OUC PPA, relative to the Existing PPA, is the NPV of the difference between the cost of alternate capacity from 2030 forward minus the FGT tariff rates over the same period. If the point of reference is the New PPA's termination date of 12/31/2023, the NPV to OUC is somewhat greater, but still likely less than the value reported by PA Consulting for the 2012-2030 period. See separate memo in which OUC's recent purchase of FTS-2 capacity from NRG, at the tariffed rate, is discussed.	The value to Vero Beach is the value that Vero could extract from a power supplier in 2024 or 2030, by offering the rights to City's FGT contracts as an inducement to lower its prices. PA Consulting estimated this value at between $5MM and $10.8MM for the period 2012 to 2030. Reasonably, this net value should be less as of 2024, and whether and how much of the value could be extracted from a future supplier would depend on the supplier and timing.

NOTES: All numeric values nominal unless stated otherwise.
ASSUMPTIONS: Numeric values shown are generally computed relative to the Existing PPA.

IMPACTS ON VERO BEACH CAPACITY CHARGE RATES IF BILLING DEMAND FALLS BELOW MINIMUM DEMAND OF 85 MW
ESTIMATES FOR 2018

MW BELOW FLOOR	BASE BILLING DEMAND W/O FLOOR	CORRESPONDING PEAK DEMAND	ADJUSTED CAPACITY CHARGE RATE	SUBJECTIVE PROBABILITY (A)
1	84	165	$10,313	LESS THAN 25%
2	83	164	$10,438	
3	82	163	$10,565	
4	81	163	$10,695	
5	80	162	$10,829	
6	79	161	$10,966	
7	78	160	$11,107	
8	77	159	$11,251	
9	76	158	$11,399	
10	75	157	$11,551	LESS THAN 15%
11	74	157	$11,707	
12	73	156	$11,867	
13	72	155	$12,032	
14	71	154	$12,202	
15	70	153	$12,376	
16	69	152	$12,555	
17	68	151	$12,740	
18	67	150	$12,930	
19	66	150	$13,126	
20	65	149	$13,328	SLIGHT
21	64	148	$13,536	
22	63	147	$13,751	
23	62	146	$13,973	
24	61	145	$14,202	
25	60	144	$14,439	REMOTE

NOTE (A): Assumes that City continue to serve Indian River Shores.

REFERENCE POINTS:
2018 Base Product Capacity Charge = $10,192/MW-month
Recent Peak Demand - January 2010 = 198 MW
2015 Peak Demand - February 2015 = 167 MW
OUC Projected Peak Demand for Vero Beach for 2018 = 177 MW
Indian River Shores Peak - 23 MW (estimated actual February 2015 peak)

ANNOTATIONS TO MINIMUM DEMAND IMPACTS DUE TO POTENTIAL SELF-GENERATION BY LARGE COVB CUSTOMERS

PREPARED BY SCHEF WRIGHT & BILL HERRINGTON

1. The City's load forecasts – for both peak demand and energy requirements – are conservative compared to those of Duke Energy Florida, FPL, and OUC. Exogenous demand growth over the 8-year period, at 0.5% per year or 1.0% per year, even if some larger customers were able to reduce their demands will offset any self-generation to some degree. 0.5% is roughly 1 MW per year, 1.0% is a little less than 2 MW per year.

2. Vero Beach is a winter-peaking utility system. Solar, however unfortunately, generally does not provide significant amounts of energy or capacity at the time of winter peaks, which generally occur in the early morning or early evening. This means that the City's peak demands are not likely to be significantly impacted by solar penetration, at least not until battery or other on-site backup technology improves significantly.

3. Many of the customers have multiple accounts at multiple locations. Under applicable Florida rules and City tariffs, each location is a separate account, and conjunctive metering is not permitted, meaning that a customer desiring to self-serve would have to have separate generation at each delivery point or location. For example, the School Board has 6 demand-metered accounts, and Publix has 4. To the extent that these are separate locations, then if either customer wished to self-generate, it would have to have generation at each location. This would erode potential economies of scale and increase initial and installation costs, all of which reduce the economic incentive to self-generate.

4. The timing of these customers being able to design and implement full self-generation in the next 8 years is not favorable. Solar with on-site backup power supply, such as would facilitate customers actually disconnecting from the City's system, is not likely to achieve significant penetration during the 8-year term of the New PPA.

The cost of small natural gas-fired generation is not cost-competitive with the City's rates. The only technology that would likely be cost-competitive would

be what is commonly called "Combined Heat and Power," frequently referred to by its acronym "CHP." This technology involves using the electric generator to make electricity and then capturing heat from the combustion process first to drive absorption chillers, which produce chilled water for use in air conditioning (cooling) applications, and then using the remaining heat to heat water. (A similar technology involves using natural gas or another fossil fuel to power an engine that turns a generator and that also powers a heat pump, with heat recovery used to heat water.) These CHP and similar technologies, however, only work economically in applications where there is a significant water heating load, e.g., hospitals, hotels, dormitories, and such. The only customer that has this type of water heating demand is the hospital.

5. Most likely customers would want standby or backup power from the City. This would keep the City's peak demand levels higher. On the revenue side, any revenue reductions due to lower kWh sales would be at least somewhat offset by standby/backup charges for the customers' requirements that the City would be expected to serve.

6. Reduced energy purchases from self-generating customers WILL exert upward pressure on rates, but it will NOT NECESSARILY reduce the amount of capacity that we need to meet our peak demands, and thus will not necessarily cause our peak demand requirements to fall to a level low enough to implicate the minimum demand provisions of Section 15.11.3.

7. Fairly stable rates provided by the "levelizing" demand charge structure under the New PPA means that whatever incentives customers may have to self-generate, they are less likely to be significantly increasing over the next 8 years.

VERO BEACH POWER PLANT
PEAK LOAD FOR HOUR MONTHLY

	2010 Kwh	2011 Kwh	2012 Kwh	2013 KWh	2014 KWh	2015 KWh
Jan	198,000	160,000	153,000	105,000	145,000	112,000
Feb	149,000	111,000	133,000	133,000	110,000	167,000
Mar	150,000	124,000	133,000	143,000	108,000	125,000
Apr	110,000	135,000	133,000	135,000	136,000	141,000
May	136,000	134,000	141,000	132,000	136,000	142,000
Jun	153,000	149,000	140,000	148,000	144,000	156,000
Jul	155,000	152,000	146,000	145,000	156,000	151,000
Aug	156,000	152,000	149,000	151,000	159,000	155,000
Sep	145,000	143,000	145,000	145,000	146,000	153,000
Oct	138,000	162,000	139,000	142,000	139,000	
Nov	155,000	135,000	98,000	124,000	119,000	
Dec	181,000	99,000	106,000	114,000	107,000	

IR Shores Load on 12/15/2010

Feeder	903	164	164	
	904	354	70.8	20% of 904 feeds the Shores
	905	284	284	
	913	146	146	
	914	250	250	
	Total amps		914.8	
	Total mW		21.78095	