Status Quo 2 Baseline – Assumptions review

Goals for today

April recap

- Following April 4, the SLT aligned on 3 areas in which to further develop Status Quo 2
 - Headcount: SLT developed perspective on reductions and business impact, HR team developed financial impact estimate
 - Non-labor O&M: SLT developed additional initiatives towards goal of reducing 2020 non-labor O&M budget by 10%
 - Capex: Energy, Water, Planning developed reduced capex forecast, using Status Quo 1 as a baseline
- We developed an updated status quo 2 cash flow projections based on the analyses above

Goals for today

- Review case for change presentation
- Align on Status Quo 2 key messages (what it is and is not and main outcomes)
- Review and align on major assumptions that underpin Status Quo 2; agree on any specific changes to be made to finalize if needed



Approach to status quo 2

What status quo 2 IS...

- A preliminary assessment of one course of action JEA could take within the boundaries of the current charter
- A high level assessment of the trade-offs that accompany this course of action against JEA's core values

... and IS NOT

- A proposed course of action
- An exhaustive analysis of all possible opportunities to reduce cost while minimizing impact to the organization
- A set of only "off the table options" (some initiatives proposed in status quo 2 may be implemented pending further analysis)



DRAFT 12/10/2

Executive summary

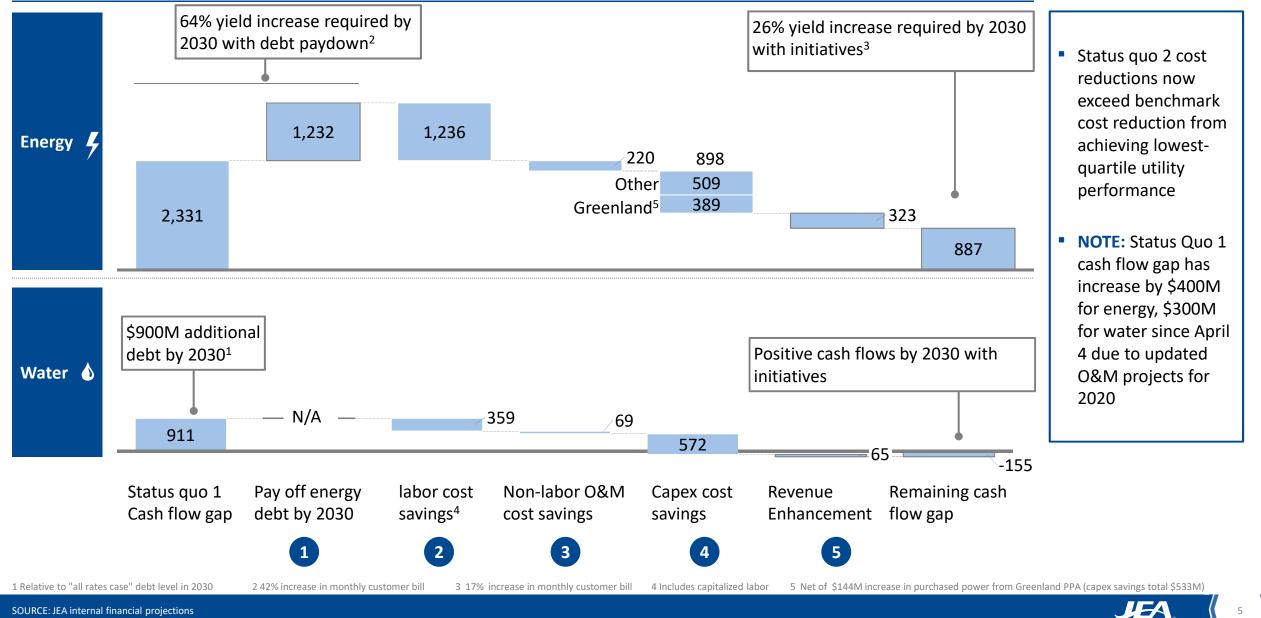
- Status quo 2 follows from Status Quo 1 a business as usual scenario that projects revenues to fall, costs to increase and a \$3.2B cash flow gap by 2030 in the absence of any action by JEA
- Status Quo 2 addresses this gap without going outside the current charter, which prevents JEA from aggressively pursuing new business opportunities
- In the absence of charter change, Status Quo 2 reduces headcount, cuts capital investment, initiates allowable new revenue opportunities, and raises rates where necessary
- Status Quo 2 also reduces debt levels in the energy business, anticipating increased competition from distributed generation and accelerated revenue loss post 2030
- Status Quo 2 cuts the cumulative cash flow gap to under \$1B (\$732M by 2030) and eliminates the cash gap in the water business, and still requires a 26% increase in required energy revenue yield by 2030
- However, absent an integrated strategic plan, Status Quo 2 will reduce the quality of service JEA provides, negatively impacting customers, the community, the environment, and JEA employees



Potential to reduce cash flow gap by \$2.5B through levers within JEA constraints

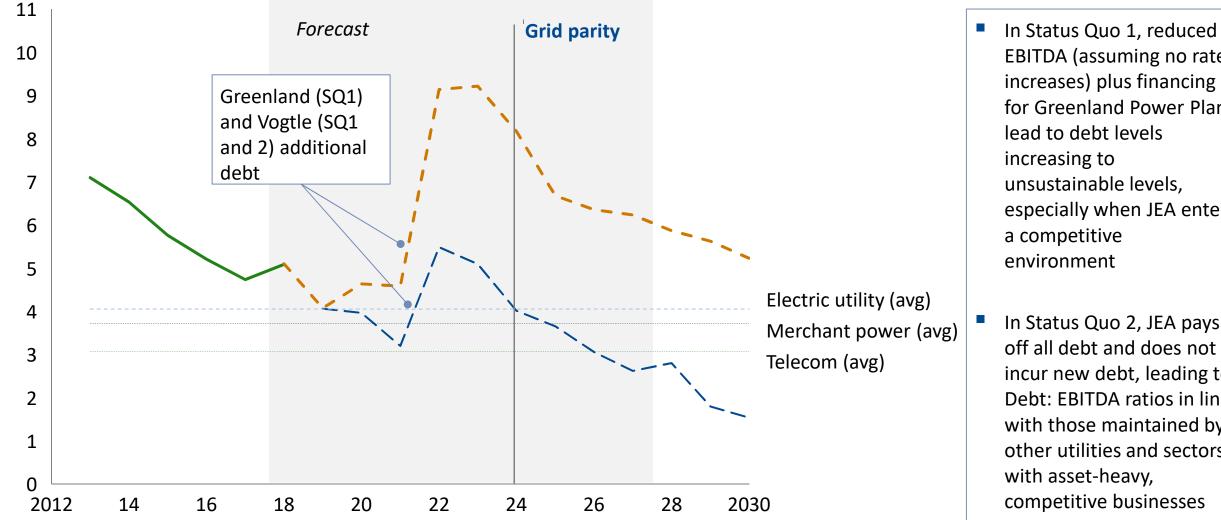
PRELIMINARY

Cumulative cash flows 2019 – 2030, \$M



Status Quo 2 shows JEA Energy Business reducing debt levels in line with other competitive Status Quo 1 sectors post grid parity Status Quo 2

Historic and projected debt to EBITDA - Energy, multiple



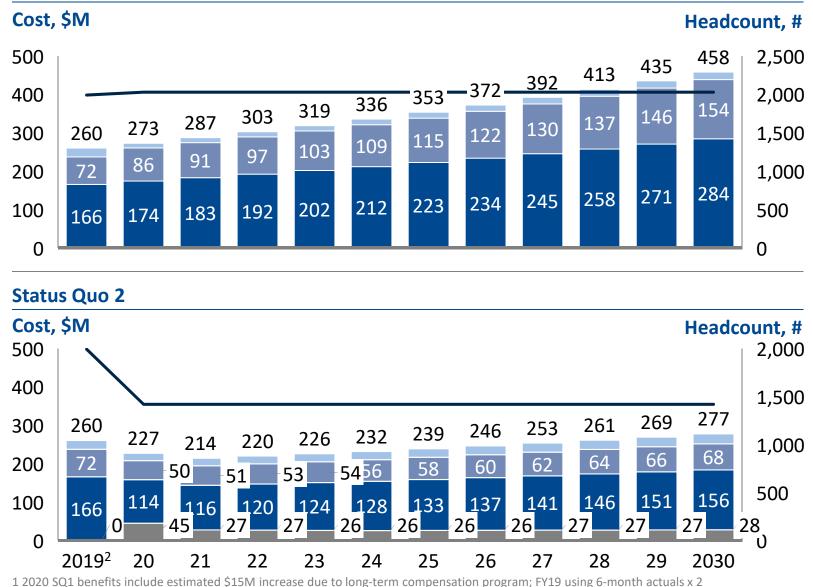
EBITDA (assuming no rate increases) plus financing for Greenland Power Plant lead to debt levels increasing to unsustainable levels, especially when JEA enters a competitive environment

In Status Quo 2, JEA pays off all debt and does not incur new debt, leading to Debt: EBITDA ratios in line with those maintained by other utilities and sectors with asset-heavy, competitive businesses

1 Electric. telecom and merchant constitute median ratios 2013 - 2017

2 Status Quo 2 reduces headcount by 29%, but maintains the salary increases projected in Status Quo 1

Status Quo 1



FTE OT Benefits¹ Salary Contract

Assumptions

- In status quo 1, labor costs increase by 5% from FY19 to 20 (using actuals for FY19 and current budget estimate for FY20), and headcount increases slightly assuming vacancies are filled
- Labor costs increase 5-6% thereafter in SQ1, based on historical increases, including introduction of long-term compensation program and assumptions around increased medical benefits funding needs
- In status quo 2, a headcount reduction of 29%, or 574 FTE, conducted in FY19 is realized in FY20, given severance and leave
- Status Quo 2 removes the long-term compensation increase and slows salary and benefits growth to 3% annually after FY20

Labor details - energy Benefits Contract Salarv Status Quo 1 Cost, \$M Headcount. # -₁₄₆-154-162 Status Quo 2 Cost, \$M Headcount. # _87___ ____84__ Ω 2019¹

- 26% (168 FTE) headcount reduction in all electric system areas (generation, substation and transmission, distribution)
- Outsourcing of select functions in generation with additional 14% (87 FTE) reduction)

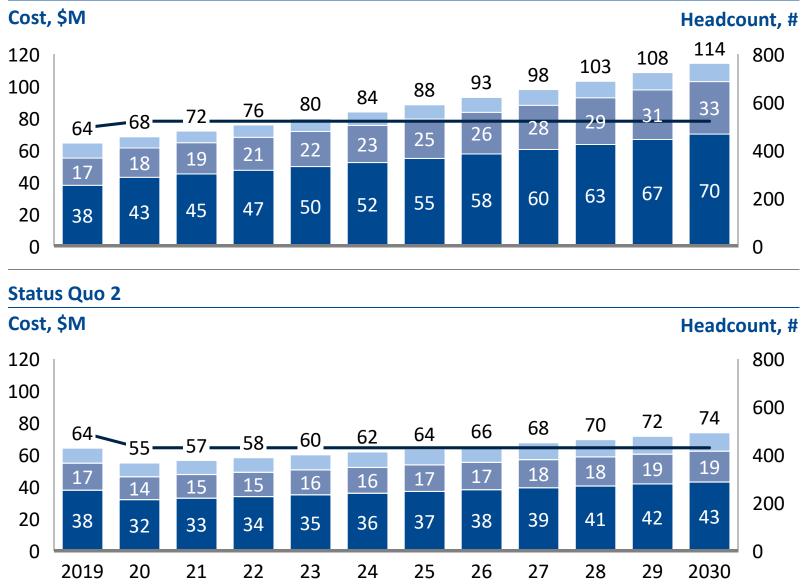
Implications:

- Customer: Decrease in reliability with fewer employees available for regular maintenance and outage response (potential reversal of recent gains in SAIDI / SAIFI / CEMI5 to among best in state)
- Community: Reliability impact and delays to connecting new developments and repairing public lighting; reduced ability to provide mutual aid during storm events
- Financial: Will likely increase corrective maintenance and replacement power purchase; limited opportunity to grow the business when customers are dissatisfied with core product
- Employee: decreased leadership oversight, training opportunities, morale



2 Labor details – water and wastewater

Status Quo 1



Major assumptions:

Series

13% (62 FTE) headcount reduction overall

Benefits

 Reductions come from reduction in night and weekend crew capabilities, reduced maintenance schedules, reduced support function capabilities within business area

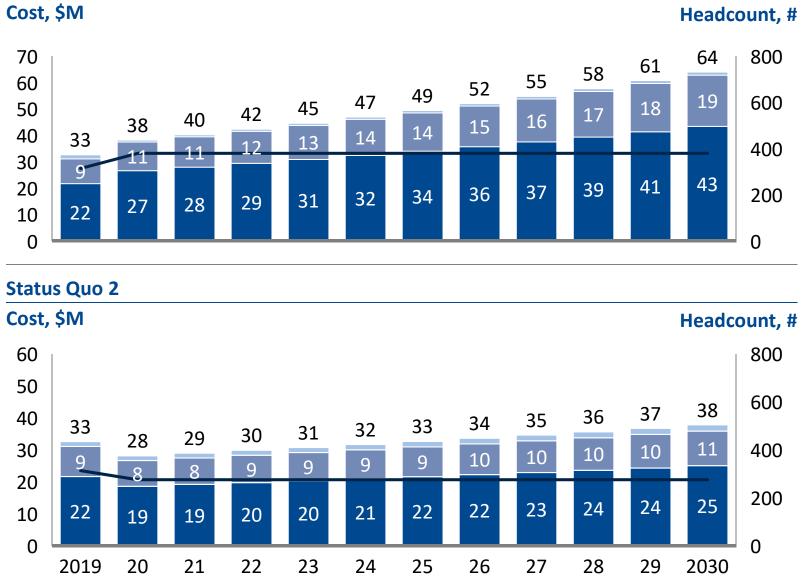
Implications:

- Customer and community: Decrease in reliability with reduced regular maintenance, increased risk of extended water safety issues during storms
- Financial: Will likely increase corrective maintenance spend; potential need to rely on additional contractors
- Environmental: increased risk of pump station overflows due to fewer clean-outs and maintenance
- Employee: decreased leadership oversight, training opportunities, morale

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Labor details - customer

Status Quo 1



[#] Major assumptions:

12% (38 FTE) headcount reduction overall

Benefits

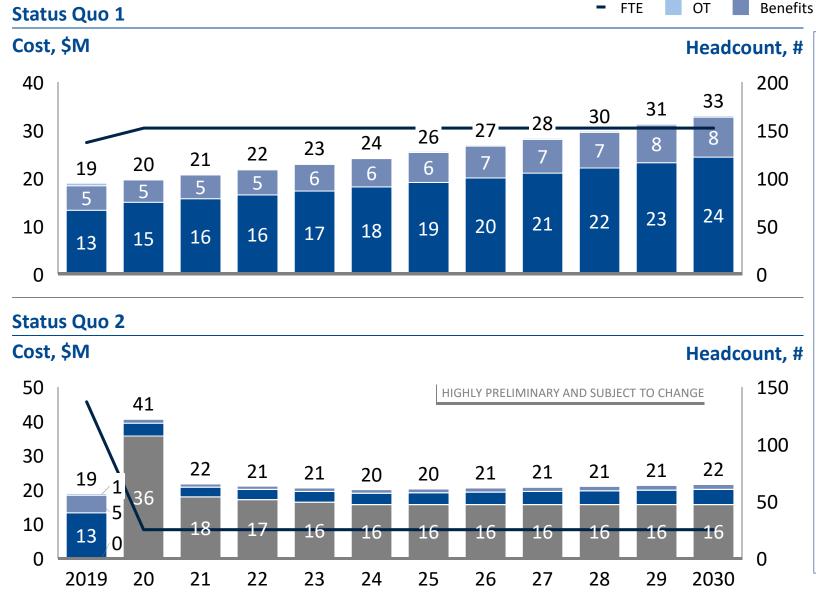
Salarv

- Reduces or eliminates most community engagement and communication functions
- Reduces customer service levels, e.g. by reducing key account and low income teams, closing customer care center, reducing scope of customer solutions programs

Implications:

- Customer: Decreased service levels and options for customers
- Community: Reduced awareness of JEA activities, reduced understanding of JEA's role in community
- Employee: decreased leadership oversight, training opportunities, morale

2 Labor details - TS



Major assumptions:

Salarv

 Outsource ~80% of JEA TS staff to 3rd party provider (112 FTE)

Contract

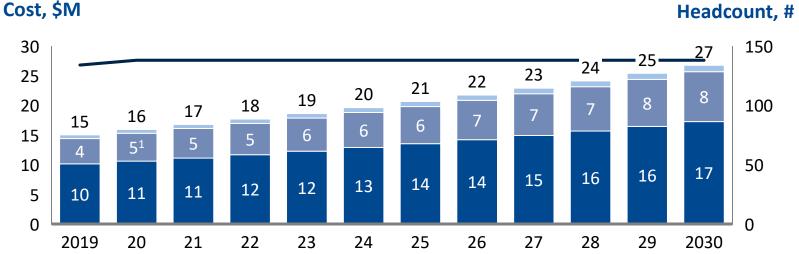
- Retain core TS team to manage contract and pursue specific technology projects needed by utility (limited to what is still needed in status quo 2)
- Assume transition period in 2020 with both contract and employee costs, and \$13M onetime costs to set up contract
- Savings begin to accrue in 2023 post transition period, with net \$35M savings 2020-2030

Implications:

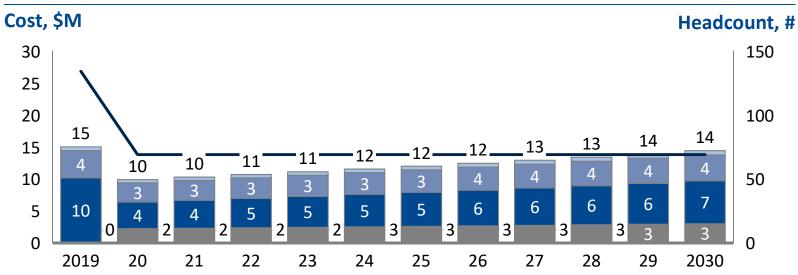
 JEA internal: lower cost and higher quality service in long run, with increased access to IT innovations; potential for disruption in service in interim and need for rigorous contract management

2 Labor details – supply chain

Status Quo 1



Status Quo 2



- FTE OT Benefits Salary Contract

t, # Major assumptions:

- Assumes 21% (29 FTE) reduction in headcount, with additional 26% of headcount (36 FTE) outsourced in select functions
- Assumes cuts to all areas within supply chain (ops support, procurement, emergency preparedness)

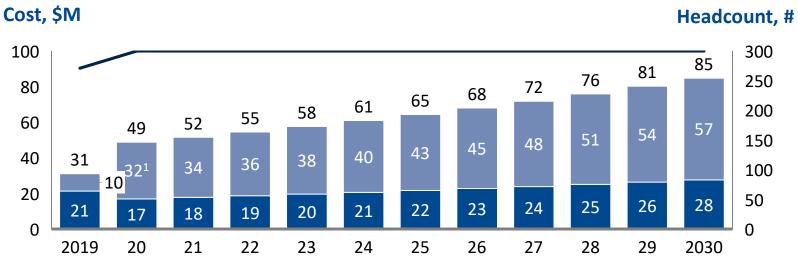
Implications:

 JEA internal: potentially reduced ability to perform core services with lower levels of support

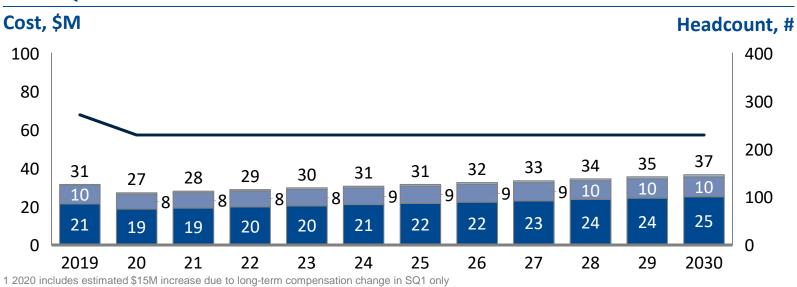


Labor details – corporate, administrative, SLT

Status Quo 1



Status Quo 2



[#] Major assumptions:

FTF

• 15% (42 FTE) reduction in headcount overall

Benefits¹

Salarv

 Reductions vary by area across environmental, compliance, government affairs, finance, HR, planning

OT

- Positions reduced or eliminated include technicians, clerks, security staff, and analysts
- Includes reduction of SLT by 40% (from 15 positions to 9), including:
 - Consolidating CEO / MD and COO / president into single position
 - Replacing CFO position with comptroller
 - Moving Energy and Water Planning within Energy and Water VP/GMs
 - Eliminating CITO, CAO, CGAO

Implications:

 JEA internal: potentially reduced ability to perform core services with lower levels of support

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3 Status Quo 2 reduces total 2019-30 energy capex by 37% (32% when PPA costs are included)

Category	Total 2019-2030 spend – Status Quo 1, \$M	Total 2019-2030 spend – Status Quo 2, \$M	% change from SQ1	Assumptions	Risks
R&R	1,728	1,278	-26%	Cancel or defer planned generation maintenance, PPAs, T&D maintenance	 Customer and community: Decrease in reliability with reduction in R&R Eigensick bases
Expanded generation - capacity total	533	144	-100% -73%	Cancel Greenland and replace with PPA	 Financial: Increase maintenance costs; potential costs in emergency repair and replacement; PPA terms
Substation and transmission capacity	123		-16%	Cancel substation reconfiguration, defer substation upgrades	 potentially unattractive in long term Environmental: Potentially reduced air
Distribution capacity	237	103	-1%	Cancel substation feeder network project; defer upgrades	quality from decreased generation fleet maintenance
TS	163	234	-22%	25% reduction in TS spend starting 2020	
Total	2,785	128 1,743- 1,887	-37% -32%)	

14

3 Status Quo 2 reduces total 2019-30 water and wastewater capex by 22%

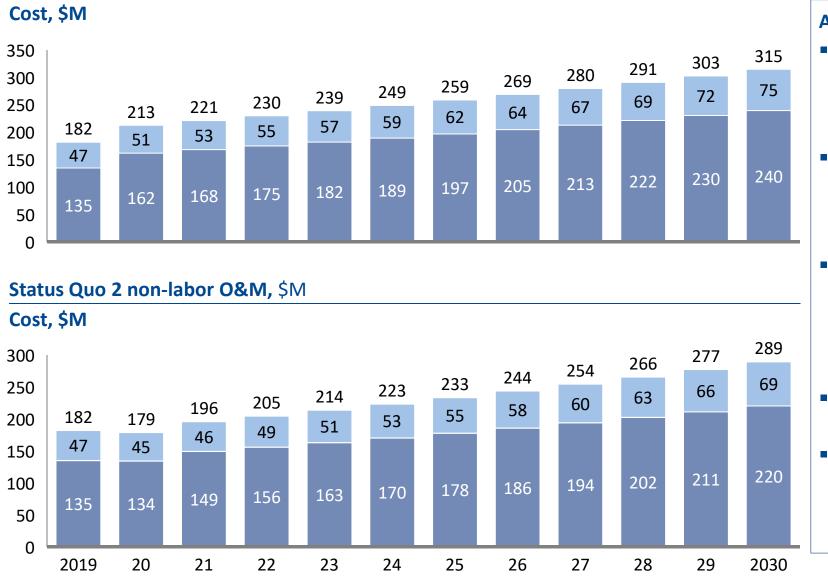
Category	Total 2019-2030 spend – Status Quo 1, \$M	Total 2019-2030 spend − Status Quo 2, \$M	% change from SQ1	Assumptions	Risks
Renewal and replacement	1,293	985	-17%	Defer and reduced rehabilitation, improvement, replacement; reduce TS	 Customer and community: Decrease in reliability with reduction in R&R potential for moratorium on new
Growth / new connections: collections, transmission, pump	279	261	-6%	Reduce well rehab and replacement	 development in South Grid Financial: Reduced revenue from expanded reclaim
Growth / new connections: wastewater treatment	199	-199	0%	No change	system; increase maintenance costs; potential costs in
new supply - reclaim	205	-176	-14%	Defer and reduce reclaim capacity and storage projects	 emergency repair and replacement Environmental: Delay in addressing supply
New supply - purification, pipelines, wells	327	-129	-61%	Removed water purification phases 2 and 3 and 3 rd river crossing	challenges
Reliability and resiliency	325	-201	-38%	Remove planned spend on facility generators, reduce future resiliency spend	
Enironmental quality / water quality	32	-32	0%	No change	
Biosolids / other	53 53	-53	0%	No change	
TOTAL	2,713	2,036	-22%)	

SOURCE: JEA

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4 Status Quo 2 reduces non-labor O&M by 10% in 2020 from Status Quo 1 base, but maintains increases thereafter

Status Quo 1 non-labor O&M, \$M



Assumptions

- Status Quo 1 projects a 17% increase in FY20, followed by annual 4% increase in non-labor O&M (materials and supplies, contractors, other), based on historical rate of increase
- In status quo 2, cost reduction measures are taken within each business area in 2020 totaling \$25M, less \$1M in 1-time costs to implement measures
- Status quo 2 also includes \$10M in one-time cost-savings in 2020 from reduced legal fees and \$.5M annual savings starting 2021 by renting a less expensive new headquarters building
- The projected SQ1 cost increase in FY20 means non-labor costs decrease by 2% in FY20
- While \$22 of \$25m cost reduction measures are ongoing each year, reductions are applied to the same 4% growth of O&M as in SQ1

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Water Energy

4 Non-labor O&M – key initiatives

FY20 SQ1 vs SQ2 comparison, \$M		Key initiatives	Risks
Initiatives Legal fees	25.0	 Change from time-based to operating hours-based maintenance 	 Customer: reliability risk from vegetation cycles
213 35 -12% 25	6.3 Energy	 Increase vegetation management cycle Improve contractor management 	 Minimal impact from operating hours maintenance, contractor management
10 179		 Cancel STPO alternatives and resiliency planning studies 	 Community: delay in STPO program; potential increased water issues during
	5.0 Water	 Reduce emergency generator availability Reduce chemical usage 	 major storm events Environmental: potential TMDL risk from chemical usage
	2.2 Customer	 Reduce marketing and public awareness campaigns 	 Community: Reduced awareness of JEA activities and changes
	2.5 TS	Move Oracle support to 3rd party providerReduce support for legacy applications	 Minimal external impact; potential reduced employee satisfaction
	2.4 Supply chain	 Reduce building maintenance, upkeep, security 	 Community: Reduced quality of JEA buildings
	6.8 Corporate and admin ³	 Cancel STPO engineering Reduce professional services related to environmental permitting, planning, monitoring 	 Environmental: Reduced ability to control JEA environmental impact Community: Reduced security; delay in septic tank phase out
SQ1 ¹ SQ 2 1-time SQ2 Boductions ² cost		-	

Reductions² cost

 1 Includes utility spend, which was not evaluated for reduction
 2 Does not include non-labor savings from outsourcing initiatives

 3 Includes supply chain, environmental, compliance, gov affairs, HR

5 Revenue initiatives developed to date provide \$389M additional revenue by 2030

Expand electrification 📕 Real estate optimization 🧧 Retail marketplace 📕 Residential Solar Application Fee

2019-2030 pot	ential, \$M		Initiative	Overview	Risks & considerations
429	44		 Expand electrification 	 Convert more commercial and industrial customer to electric (e.g., vehicles) 	 No regrets
	41	389			
211			 Real estate optimization 	 Sell/lease surplus properties 	Trade-offs; less flexibility
			 Retail marketplace 	 Online marketplace to sell energy-related appliances and services. Use to collect data, create engagement and awareness, and generate modest income. 	 No regrets
150			 Residential Solar Application Fee 	 Charge an application/inspection fee to cover the cost of solar PV interconnection reviews and inspections 	 Trade-offs; publicity and customer pushback
48 21					
2019-30 impa	act Cost to implement	Net impact			

Additional non-labor O&M reduction and revenue enhancement initiatives

Corporate cost (1/2)

Annual potential, \$M

1	2.4	
2	2.4	
7	0.6	3
8	0.5	4
8 9 10 11	0.4	5
10	0.2	6
1	0.1 0.1 0.1	
С	ost saving	gs

Initiative	Overview	Risks & considerations	Annual opportunity, \$M
1 Facilities O&M Other Services Charges (OSC) reduction	 40% reduction in maintenance, landscaping, paintaing, planned rehab work; eliminate PM on generators 	Trade-offs	• 2.4
2 Eliminate seption tank phase out engineering		it • Trade-offs	• 2.4
3 Reduce professional services, trainin travel, misc	 Reduce professional services relate to resource planning 	ed • Trade-offs	• 0.6
4 Reduce security patrol	 Reduce number of security patrol personnel 	 Difficult; increased security risk across affected areas 	• 0.5
5 Professional services reduct	 Reduce professional services and supplemental staff for permitting, compliance 	Trade-offs	• 0.412
6 Reduce profess ional services	 Reduce professional services for Q other activities 	A, ■ Trade-offs; increased regulatory risk	• 0.246
7 Reduce profess ional services	 Reduce professional services 	Trade-offs	• 0.243

Corporate cost (2/2)

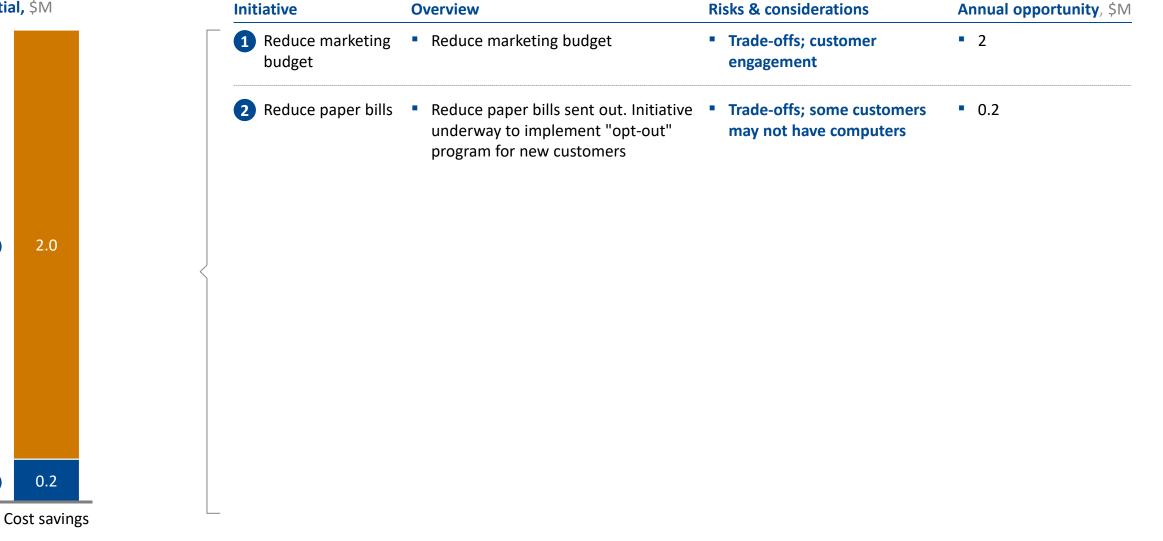
Annual potential, \$M	Initiative	Overview	Risks & considerations	Annual opportunity, \$M
 2.4 2.4 	8 Reduce spend on civil service position assessment	 We currently budget \$932K for civil service position assessment development with PSI. To date, approximately 60% of our position assessments have been developed, including many of the repetitive hire positions. We can halt that and bring it back in house if necessary. Also, if we freeze or greatly reduce hiring there should be a lesser need for assessment development. 	• Trade-offs	• 0.2
7 0.6 3	 9 Miscellaneous supplies and tools reduction 	 Reduce professional services and supplemental staff for labs, remediation 	Trade-offs	• 0.195
8 0.5 4 9 0.4 5 10 0.2 6	10 Reduce downtown security	 Reduce number of downtown security personnel 	 Trade-offs; increased security risk across affected areas 	• 0.1
$ \begin{array}{c} \textbf{10} \\ \textbf{0.2} \\ \textbf{11} \\ \textbf{0.1} \\ \textbf{0.1} \\ \textbf{0.1} \end{array} $	Reduce tools, training, travel	 Reduce tools, training, travel 	 Trade-offs; increased regulatory risk 	• 0.06
Cost savings				

Customer cost

Annual potential, \$M

1

(2)





Energy cost (1/2)

Annual potential, \$M

1

2

3

4

5

3.8

1.8

1.0

0.5

0.5

0.2 0.3

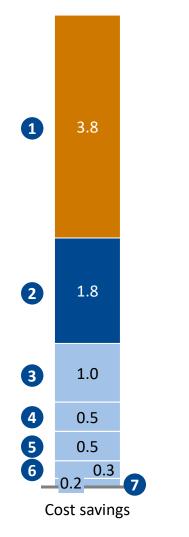
Cost savings

Initiative	Overview	Risks & considerations	Annual opportunity, \$N
 Change to an "operating hours" overhaul scheduling strategy 	 Change from a "time frequency" based decision making process for major outage requirements, to an "operating hours" based approach as currently accepted by the OEM's (savings currently based on deferred maintenance (not eliminated)) 	 Trade-offs; Risk is proportionate to the amount of hours on the machines. Insurance (FM Global) carrier concerns. 	• 3.8
2 Outsource material handling functions	 Outsource material handling functions at Northside Generating. This would include but not limited to, fuel unloading and handling, ash handling and disposal and by-product support 	IBEW	• 1.8
 Contractor management 	 Develop and implement a contractor management program (currently sized based on NGS) 	 Trade-offs; monitoring and additional cost reduction burdens on current contractor could create discontent 	• 1.0 s
 Inventory optimization 	 Better materials management and siting in business areas where materials are fast-turn and workforce is distributed and currently has to make extra trips to pick up materials 	No regrets	• 0.5



Energy cost (2/2)

Annual potential, \$M



Initiative	Overview	Risks & considerations	Annual opportunity, \$N
5 Vegetation trim cycle	 Increase cycle by 20% (to 36 months) to decrease costs 	 Trade-offs; reliability metrics worsen, customer satisfaction decrease 	• 0.5
6 JEA personnel for transmission work	 Utilize JEA personnel to perform transmission maintenance, eliminating need for contractor 	 Trade-offs; may affect pricing for unit contract 	• 0.3
7 Eliminate participation in 3 rodeos	 Eliminate participation in 3 rodeos 	 Trade-offs; morale 	• 0.2



IT cost

Annual	potential	.ŚM
		· · · · ·

1

2

3

4

1.8

0.4

0.2

0.2

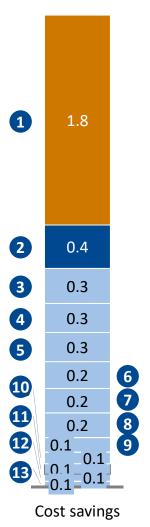
Cost savings

Initiative	Overview	Risks & considerations	Annual opportunity, \$M
1 ERP cost optimization	 3rd party support provider for Oracle and other support 	Trade-offs	• 1.8
2 Reconcile vendor use of duct bank to existing project agreements	 Recover revenue according to original contracts with Comcast for use of space 	Trade-offs	• 0.4
3 Telecom audit	 Identify over-billing opportunities to address 	Trade-offs	• 0.2
4 Rental and lease	 Negotiate cost of rented and leased equipment 	 Trade-offs 	• 0.2



Water cost (1/2)

Annual potential, \$M



Ini	tiative	Overview	Risks & considerations	Annual opportunity, \$M
- 1	Scope and Fee Negotiator	 Hire an expert with experience in negotiating rates and fee structures for capital projects 	 No regrets 	• 1.8
2	Wastewater Biosolids Hauling	 In-source biosolids hauling from wastewater reclamation facilities to Buckman WRF 	 Trade-offs; unclear level of impact 	• 0.4
3	Project Funding Revisions	 Modify project funding processes and requirement to streamline business processes 	No regrets	• 0.3
4	Design-Build Continuing Service Contract	 Develop master contracts with qualified design-build contractors for repeat, small capex jobs 	No regrets	• 0.3
5	Reduce coating / paint for metal surfaces	 Reduce coating / paint for metal surfaces 	 Trade-offs; reliability 	• 0.3
6	Hydrogen Peroxide Use Reduction	 Optimize hydrogen peroxide feed rate while maintaining odor control (estimate 10% reduction in usage possible) 	 Trade-offs; potential customer dis-satisfaction 	• 0.2

Water cost (2/2)

Annual potential, \$M

1

2

3

4

5

10

11

12

13

<u> </u>	nitiative	Overview	Risks & considerations	Annual opportunity, \$M
	7 Remove GIS position for outage mapping	 Reduce GIS position for outage mapping 	 Trade-offs; community 	• 0.2
	8 Reduce potable pump reservation	 Reduce portable pump reservation 	 Trade-offs; resiliency 	• 0.2
	9 Glycerin Use Reduction	 JEA can reduce glycerin usage and still meet compliance limits (28% under compliance limit now) 	 Trade-offs; environmental risk 	• 0.1
	Reduce standards studies	 Make do with in-house investigation of proposed standards changes 	 Trade-offs; efficiency 	• 0.1
	Perform Crane Inspections Utilizing JEA Personnel	 Bring crane inspections in-house if certifications can be obtained 	 Trade-offs; effort involved to certify 	• 0.1
	Perform CCTV inspections in-hous	 Perform CCTV inspections in-house e 	 Trade-offs; efficiency 	• 0.1
	3 Reduce cleaning of pumps and wells	 Reduce cleaning of pumps and wells 	 Trade-offs; risk of clogging 	• 0.1

Cost savings

1.8

0.4

0.3

0.3

0.3

0.2

0.2

0.2

0.1

0.1

0.1

0.1

0.1

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Status Quo 1-2 summary

Status quo 1 and 2 summary - energy

			2019	2030 - Status Quo		2030 - Status Quo 2	
		2007		A – keep COJ	B – no COJ	A – keep COJ	B – no COJ
	Number of accounts, 000 ¹	409	471	543		543	
	Sales, mn MWh ¹	13.2	12.1	11.3		11.3	
	Non-fuel Revenue, \$M	515	860	1,146		956	
Financial value	Expenses (O&M + capex, \$M)	379 ¹	527	623		➡ 380	
	Net income ²	(135)	53	1 89		321	
	Years to pay off debt	32	25	>100		• 0	
	Rates (\$ yield per MWh)	37	62	94	8 6	78	† 70
	Rates (monthly residential bill)	104	123	168	159	144	134
Value to customer	Quality of service	Good	better			-/+	
Value to	# employees	TBD	1460	1460		948	
community	City contribution	73	93	104	U 0	104	0
Environmental <i>v</i> alue	% generation from renewables	0%	2%	6%		1 6%	
alue							

1 O&M electric system only, all other years include corporate and 2019, using total debt / net income for 2030 projections 2 EBTDA minus capex – calculated by solving for coverage ratios such that net income increases in status quo scenarios

3 Balance sheet debt only; using last scheduled payment in 2007

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JEA.

Status quo 1 and 2 summary - water

	L and Z Summary - Wa			2030 - Status Quo	2030 - Status Quo 2
		2007	2019	Α	A
	Number of accounts, 000 ¹	303	353	417	417
	Sales, 000 Kgal ¹	43	36	1 38	38
Financial value	Non-fuel Revenue, \$M	249	474	521	522
	Expenses (O&M + capex, \$M)	266	357	510	370
	Net income ²	(115)	1.2	(-122)	▲ 44
	Years to pay off debt ³	34	25	N/A	24
	Rates (\$ yield per kgal)	2.4	4.3	4.6	4.6
	Rates (monthly residential bill)	50	70	70	70
Value to customer	Quality of service	Good	better	-	
	# employees	TBD	495	495	433
Value to community	City contribution	18	25	1 31	1 31
	Septic tank phase-out progress	N/A	Minimal	Minimal	📕 None
Environmental value	Nitrogen discharge (tons)	850	566	560	-/+

1 Water accounts 2 EBTDA minus capex – additional debt is issued to cover capital expenditures 3 Using last scheduled payment for 2007 and 2019, Currently not solved in SQ1 given that additional debt is issued to cover capex