

DRAFT MINUTES

**TOWN OF APEX
TOWN COUNCIL WORK SESSION
TUESDAY, APRIL 18, 2023
3:30 P.M.**

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The Apex Town Council met for a work session on Tuesday, April 18, 2023 at 3:30 p.m. at the Apex Town Hall located at 73 Hunter Street in Apex North Carolina.

This meeting was open to the public. Members of the public were able to attend this meeting in-person or watch online via the livestream on the Town’s YouTube Channel: <https://www.youtube.com/watch?v=F2Ww1L6fTQ>

[ATTENDANCE]

Elected Body

- Mayor Jacques K. Gilbert (presiding)
- Mayor Pro-Tempore Audra Killingsworth
- Councilmember Brett Gantt
- Councilmember Ed Gray
- Councilmember Terry Mahaffey
- Councilmember Arno Zegerman
- Absent: None

Town Staff

- Town Manager Catherine Crosby
- Deputy Town Manager Shawn Purvis
- Assistant Town Manager Demetria John
- Assistant Town Manager Marty Stone
- Town Attorney Laurie Hohe
- Town Clerk Allen Coleman
- Deputy Town Clerk Ashley Gentry
- Electric Tech Services Manager Rodney Smith
- Stormwater Utility Coordinator Evan Kirk
- Electric Utilities Director Eric Neumann
- Budget and Performance Management Director Amanda Grogan
- Finance Director Antwan Morrison
- Consultant w/1898 & Co. Part of Burns and McDonnell Craig Brown
- All other staff members will be identified appropriately below.

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1 **[COMMENCEMENT]**

2 **Mayor Gilbert** called the meeting to order at 3:37 p.m. and led the Pledge of
3 Allegiance.

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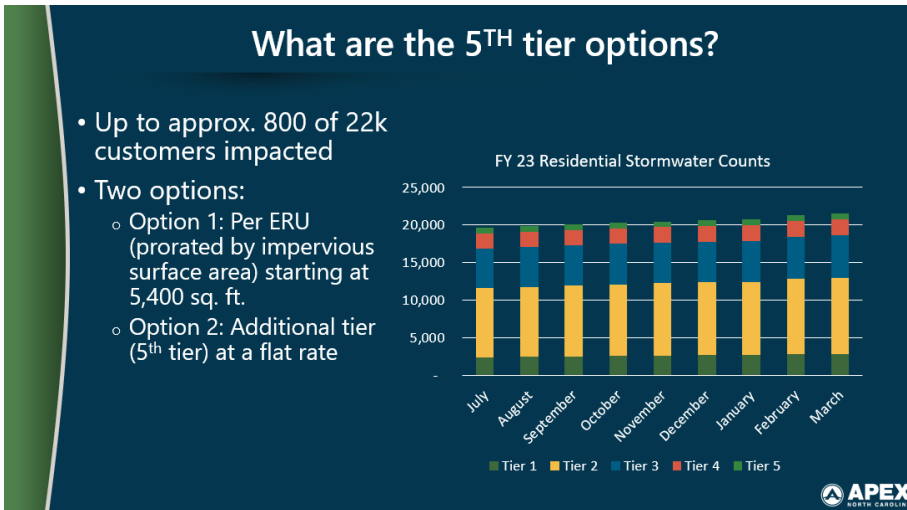
5 **[AGENDA ITEM NO. 1 - STORMWATER UTILITY-FEE UPDATE AND POTENTIAL 5TH TIER]**

6 **Evan Kirk, Stormwater Utility Coordinator** provided an overview of the Stormwater
7 Utility Fee and potential 5th Tier Options.

8 **[SLIDE 1]**



10 **[SLIDE 2]**



DRAFT MINUTES

1 [SLIDE 3]


5TH TIER Pros & Cons

Pros:

- o Increased equity among residential customers
- o Modest fee increases
- o Properties with large impervious area may see bill increase when adding additional impervious
- o ~\$24,000-\$50,000 per year in increased revenue (~1-2% of total revenues)

Cons:

- o Administrative cost to implementing
- o Communications Plan needed
- o Some increased administrative cost to maintain through "true ups"
- o Potential for pushback among impacted customers




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3 [SLIDE 4]

Implementing a 5th tier

- Communication
 - o Mailers to all impacted customers (up to ~800):
 - Information on exact fee increase at each particular address
 - Education on why the 5th tier was added and how it's calculated
 - Staff contact information for questions and appeals
 - o Stormwater Utility Fee website updates
 - o Separate public notice of hearing (required by statute)
- Implementation
 - o Edit billing in New World
 - o Update GIS
 - o Ongoing "true ups"
- Timeline
 - o 3-6 months



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5 Mr. Kirk said the proposed projected rollout would be January 1, 2024.

6 [SLIDE 5]

Option 1: Per ERU

- Customers in 5th tier would be charged as if their property were non-residential (prorated by ERU)
- ~\$25,000 per year in additional revenue

STORMWATER FEES	
Stormwater fees are effective January 2022. Stormwater utility fees are based on the total amount of impervious surface on an individual lot or parcel.	
Residential - Detached single-family homes, a duplex, or a manufactured home located on an individual lot or parcel.	
Tier 1: Small (400-1,500ft ²)	\$1.50
Tier 2: Medium (1,501-3,000ft ²)	\$5.00
Tier 3: Large (3,001-4,000ft ²)	\$7.50
Tier 4: Extra Large (4,001-5,400ft ²)	\$10.00
Tier 5: Homes with more than 5,400ft ² (2 ERU) pay the non-residential rate	\$5.00 per ERU (Total Impervious Area/\$2,700ft ² * \$5)
Non-Residential - Parcels that contain more than two residential units, public/private institutional buildings, commercial buildings, parking lots, churches, etc.	
	\$5.00 per ERU (Total Impervious Area/\$2,700ft ² * \$5)
*ERU (Equivalent Residential Unit) is the GIS analysis of average impervious surface (rooftops, driveways, sidewalks, parking lots) per residential property. Approximately 2,700 ft ²	
**Properties with less than 400ft ² of impervious surface are exempt.	



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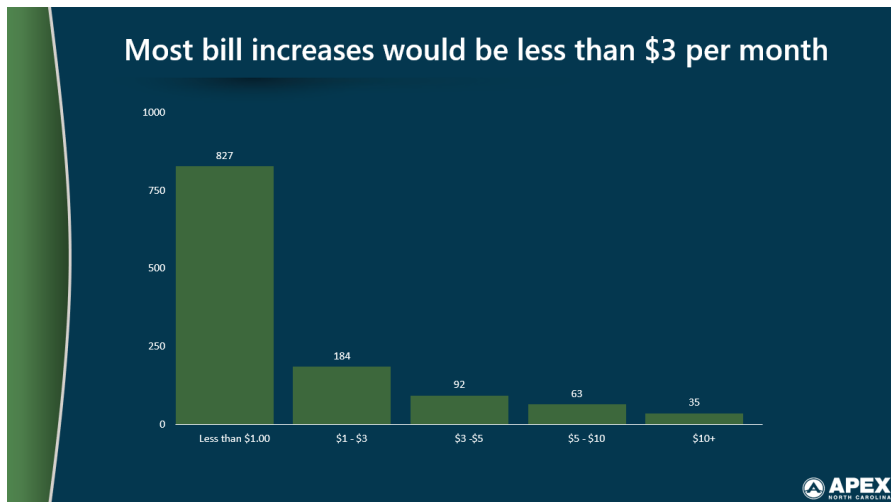
1 **Councilmember Gantt** asked if a 5500 square foot home roughly turns out to be \$10
2 or \$20 fee.

3 **Mr. Kirk** said Tier 4 stops at 5400 square feet, anyone who has a 5,401 square feet
4 home would get a charge of \$10 and "one-ish" cents. He said that's why 5400 square feet is
5 the cutoff point because if you charge them as a non-residential customer, their bill would be
6 above \$10.

7 **Councilmember Gantt** confirmed that it's not a step change, but rather a gradual
8 change.

9 **Mr. Kirk** said at that point the bill becomes prorated for every single square foot and
10 multiply that by \$5.

11 **[SLIDE 6]**



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13 **[SLIDE 7]**

Option 2: 5th tier at fixed rate

- Additional 5th tier at subjective cost (\$2.50-\$5.00 is reasonable)
- ~\$24,000-\$48,000 in additional revenue if starting at 5,400 sq. ft. impervious area

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Tier 5: Homes with more than 5,400ft ²	\$15.00
Non-Residential - Parcels that contain more than two residential units, public/private institutional buildings, commercial buildings, parking lots, churches, etc.	
	\$5.00 per ERU (Total Impervious Area/\$2,700ft ² * \$5)

*ERU (Equivalent Residential Unit) is the GIS analysis of average impervious surface (rooftops, driveways, sidewalks, parking lots) per residential property. Approximately 2,700 ft²
*Properties with less than 400ft² of impervious surface are exempt.

APEX NORTH CAROLINA

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1 [SLIDE 8]

Discussion

Option 1: Per ERU	Option 2: \$2.50-\$5.00 5 th tier	Option 3: No change
<ul style="list-style-type: none">• Most equitable• Medium increased revenue• Most administrative burden• Most difficult for public to understand	<ul style="list-style-type: none">• More equitable than status quo• Most increased revenue• Medium administrative burden• Easy for public to understand	<ul style="list-style-type: none">• Leaves opportunity open to change in future• No added administrative burden

Town staff are prepared to implement a 5th tier and would recommend mid-fiscal year (January 1, 2024) should Council approve

APEX
NORTH CAROLINA

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4 **Councilmember Zegerman** asked if measurements like 5400 square foot are looking
5 at any impervious surface like driveways, home itself, and patios.

6 **Mr. Kirk** said yes sir.

7 **Councilmember Gantt** said this was his idea. He said what bothers him the most is a
8 ten thousand square foot impervious property or bigger is getting charged the same as a five
9 thousand square foot impervious.

10 **Mr. Kirk** said that option 2 doesn't do a good job of capturing that tail because we're
11 charging everybody that same rate but the cutoff point can be changed. He said additional
12 tiers could still be added in the future. He said he could get the data of how many people
13 would fall into any potential tier.

14 **Councilmember Zegerman** asked what the gain would be from this. He said it would
15 be equitable, and that was good, but the costs would likely offset the revenue.

16 **Councilmember Gantt** said he didn't think that was right.

17 **Mr. Kirk** said that in the first year, the cost would offset the revenue in the form of
18 increased staff time, but even in the future the revenue gains would be insignificant. He said
19 that they weren't doing this for revenue purposes.

20 **Councilmember Zegerman** said this adds more time having to be dedicated towards
21 administrative work, in order to monitor the tiers, that could be used for other things. He
22 asked why they were wanting to do this if it didn't come up with more funding to help fix
23 stormwater management.

24 **Councilmember Gantt** asked for Mr. Kirk to clarify what the increase in administrative
25 costs would be above current.

26 **Mr. Kirk** said it was essentially the same. He said he looks at the aerial imagery, which
27 has polygons drawn over the property to represent impervious surface, and extends the

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1 polygon if necessary to add new impervious surface, such as a patio. He said once this is
2 edited, the area of impervious surface will be calculated automatically in GIS, so he can see if
3 it changes the bill. He said in his experience, even when a property changes its amount of
4 impervious surface, fewer than 10 percent of those instances actually trigger a bill change. He
5 said the work is not as tedious as they may think, as he's already doing this process. He said
6 the \$24,000 dollars would more than cover the additional cost.

7 **Councilmember Killingsworth** said that's part of the reason why they requested
8 option two, since it would require less administration and add less work to staff.

9 **Councilmember Mahaffey** asked what problem this is actually seeking to solve. He
10 said lots of town have a flat fee, and equity was why Apex decided to institute a tier system.
11 He asked if the town has gotten any feedback on four tiers not being enough, and at that
12 point how many tiers would actually be enough. He said this doesn't decrease the costs for
13 people in lower tiers or who have less impervious surface, as he feels they would care more
14 about paying less than people with more impervious surface paying more. He said this is
15 essentially a change for the sake of a change, for an issue that isn't a big problem and
16 wouldn't provide much additional revenue. He said this was a year where many fees were
17 being changed or increased, and this was already a difficult budget to communicate to
18 citizens. He said he isn't opposed, it just seems like this change would impact very few people
19 and require more effort than it's worth. He said it would add to the narrative that Council is
20 raising all the rates just for the sake of doing so.

21 **Councilmember Gantt** asked if Mr. Kirk could speak more on the ongoing revenue
22 increase. He asked if he had an estimate of a five-year average revenue.

23 **Mr. Kirk** said he does not have that information. He said when someone adds
24 impervious surface to the parcel, it typically is less than a thousand square feet of additional
25 impervious added. He said a thousand square feet is less than two dollars per month. He said
26 this would increase revenue some, accounting for administrative costs, in the long run.

27 **Councilmember Mahaffey** said if there was a larger upfront cost to adding
28 impervious surface, then maybe people would think twice about adding more, versus the
29 slight monthly increase. He asked if the town has any authority to charge for these things at
30 permitting time.

31 **Mr. Kirk** said costs like that had to be proportional to the administrative costs incurred by
32 the town

33 **Councilmember Mahaffey** asked if the permit costs have to be fixed with the town's
34 costs instead of being based on impact or another measure.

35 **Mr. Kirk** said that this could be the case if the town had to implement a specific
36 project that was directly caused by an increase in impervious surface. He said he's never
37 heard of an upfront fee for impervious.

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1 **Councilmember Zegerman** asked how many units are in the first tier. He asked if the
2 town can add tier 5 and set the rates for tier 1 to zero dollars.

3 **Mr. Kirk** said it could be set lower, but it would be legally dubious to set it at zero
4 dollars because the town can't set a fee based off of income or other protected classes. If it
5 lowered it could possibly be a dollar and twenty-five cents.

6 **Councilmember Gantt** said when he proposed this, he was projecting additional
7 revenue of \$25,000 a year, which isn't a lot but it adds up. He said after four years, this could
8 potentially bring in \$100,000 to do a big project. He also liked that this money would be
9 coming in from the top 1% of the bracket.

10 **Councilmember Zegerman** said he likes the idea, but he's trying to figure out why
11 they would be doing this if the net effect and impact of it is small.

12 **Councilmember Mahaffey** said it sounds like a solution in search of a problem.

13 **Councilmember Gantt** said it was \$25,000 a year from the top one percent.

14 **Councilmember Mahaffey** said yes, but that he doesn't believe that they care and
15 that it's a conversation that they Council didn't have to have if they didn't want to. He said he
16 is not opposed to it at some point in the future or raising rates with assumption that they go
17 up eventually, but he said believes the rates should be tied to increased service or a specific
18 project.

19 **Councilmember Gantt** said he thinks there are millions of dollars' worth of
20 stormwater projects that need to be done, and every little bit helps.

21 **Mayor Pro Tempore Killingsworth** said she doesn't disagree, and there are a lot of
22 stormwater projects that need to be done that can be very costly.

23 **Councilmember Gantt** said he imagined every year the town would use this on some
24 of the smaller projects.

25 **Director Grogan** said for fiscal year 2024 there is an assessment that's in the budget
26 to help identify what these projects are so the town can begin to map out what the CIP for
27 stormwater funds looks like. She said it's hard to speak on it right now until the assessments
28 are completed, and phase one of that is coming up in the upcoming year.

29 **Councilmember Gantt** asked if there were a bunch of twenty thousand-dollar
30 projects that could be done.

31 **Mr. Kirk** said there was a stabilization of a culvert project in the downtown area and
32 that project would cost about \$15000, and that's an example of a stormwater project that
33 stormwater dollars were used for. He said there are projects already identified that have work
34 orders in the system for the upcoming years.

35 **Mayor Gilbert** said this is a great discussion and asked what does Mr. Kirk needs from
36 Council today.

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1 **Mr. Kirk** said he didn't necessarily need a decision today if further discussion is
2 needed. He said he would accept a decision if there was one so he can start preparing.

3 **Councilmember Gantt** wanted to clarify that if the town wanted to start in January of
4 next year, then it needs to be in the budget for FY 24-25.

5 **Mr. Kirk** said yes.

6 **Mayor Pro Tempore Killingsworth** said she'd like to make it easy as possible, so
7 option two or three is what she would prefer.

8 **Councilmember Mahaffey** said another thing he wanted to point out was that this
9 program just started and is in its second year. He said it has been fairly complicated already,
10 and coming back this year with a new tier and the other rating without actually solving a
11 problem, he said he doesn't think is useful. He said we need to raise 50 to 100 thousand a
12 year to do it and that's a directed action to get behind. He said that's something he could get
13 behind. He said with other things going on in this year's budget it's a discussion to have
14 further when there are more concrete plans in place.

15 **Councilmember Gantt** asked Councilmember Mahaffey if he wanted the
16 communication plan to state the examples of projects.

17 **Councilmember Mahaffey** said he's sharing option three this year.

18 **Councilmember Gray** said he is thinking of the long-term impact of this because the
19 town can always add on, and he's in favor of option two.

20 **Assistant Town Manager Stone** asked right now in the system if staff have to go back
21 and look based on the permit that's applied for to do an addition, then go back and look at
22 that particular residence to determine how much it's going to change their tiers.

23 **Mr. Kirk** said yes, there are both permitted changes in impervious structures addition
24 tools and there are unpermitted changes that impervious, such as a patio.

25 **Assistant Town Manager Stone** asked what the approach is to reviewing this, and if
26 it's every 5 years.

27 **Mr. Kirk** said the town has planning districts. He said until he can get a good sense to
28 what the workload is actually going to be he is looking at 20 percent of the town per year,
29 with 12 districts, which leaves about 3 planning districts per year.

30 **Assistant Town Manager Stone** said when doing this work, he is having to look at
31 previous percentages, and then would only be taking out a small amount of work because
32 people don't come in for additions. He said once you get into the fifth tier you don't have to
33 do anything. He pointed out that 500 or so customers are going to go up and instead of
34 going up less than a dollar, they would be going up five dollars. He said this is kind of a
35 reverse equitable thing where there is 827 that pay exactly what's owed and for impervious
36 that would go up less than a dollar, those 827 are going to go up five dollars or 2.50 right out
37 of the gate, which is Council's decision. He said it looks like there's more impact going to a

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1 set fee than doing a five dollar per fee. He said from a professional perspective, it's more
2 standard to charge per impervious once people get to the cutoff of the ERU. He said it isn't
3 usual to go above the ERU, and charge residents less than commercial. He said for
4 stormwater fees, they have to be defensible.

5 **Councilmember Mahaffey** asked why five tiers of flat fees is indefensible and four
6 tiers of flat fees is defensible.

7 **Assistant Town Manager Stone** said the gaps are much smaller. He said it is more
8 defensible in his opinion for customers to pay for anything about their ERU.

9 **Councilmember Gray** said he was convinced and changed his mind to option 1.

10 **Councilmember Zegerman** asked if the town had enough funds to do additional
11 projects does it have the staff capacity.

12 **Assistant Town Manager Stone** said stormwater is unique and has an operational
13 side and an engineering side. There's Public Works and Water Resources, so there's a lot of
14 work that can be done internal. It will help address the cost of dissipator pads, energy pads,
15 and buying other things. He said he's currently in the process of conditional assessments and
16 getting the contract going where the town will be looking at that in phases, which will define
17 maintenance projects like things that needs to be addressed versus projects that may be new
18 in the project system.

19 **Councilmember Zegerman** asked if the larger impervious services are typically the
20 bigger homes.

21 **Mr. Kirk** said yes.

22 **Councilmember Zegerman** asked if Council raises property tax rates, could the
23 money be used for stormwater management.

24 **Mr. Kirk** said they legally they can, but are not going to because of stormwater utility
25 rates.

26 **Assistant Town Manager Stone** said the direction was to set up a utility phone for
27 stormwater that would be self-supported and fully funded using stormwater fees to do
28 stormwater activities. The direction that was worked on previously in the town would not use
29 tax dollars for stormwater, he said Council can do that if that's your direction, but what cannot
30 be done is using stormwater fees that we collect for anything except stormwater.

31 **Councilmember Zegerman** said he's struggling with this one because if it had a
32 bigger benefit or a list of projects that can be pointed out it would be more attractive. He said
33 if they're going to do it he would say option 2 for five dollars. He said he would like to make it
34 big enough to be meaningful in some way.

35 **Mayor Pro Tempore Killingsworth** said she likes option 2 because it's simpler, but
36 option 1 does seem easier to defend.

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1 **Mr. Kirk** said option 1 takes out the need to modify the rate structure in the future. He
2 said option 2 leaves it open to potentially having to change the rate structure in the future.

3 **Councilmember Gantt** said option 1 captured a long tail and is interested in that. He
4 said this would bring in a very small amount of money, but the fact that it's an ongoing thing
5 is why it's worth discussing. He said \$25,000 adds up over time. He asked are there a lot of
6 small projects that could have more impact than the big ones, he said what he values in this is
7 more if there's a ton of small projects that could do a lot of good.

8 **Assistant Town Manager Stone** said he couldn't answer that because it depends on
9 where it rains.

10 **Mr. Kirk** said the system assessment is going to allow the town to begin an asset
11 management program and that asset management program combined with the CIP will allow
12 staff to rank those projects. He said this will provide a priority ranking.

13 **Councilmember Gantt** said there would be a media pushback from any increase, he
14 said the pushback would be stronger for the people with the most impervious surface if they
15 went with option 1 and had to pay 10 or more extra dollars a month.

16 **Councilmember Mahaffey** said he would rather raise rates in three different ways
17 than in four different ways. He said this would likely cause pushback from people who are
18 pre-disposed to doing that. He wondered what the justification would be from Council if any
19 of them were asked why they did this.

20 **Councilmember Gray** said adding to the larger conversation about how to tell
21 people about this, he says it's much more of an educational basis. He said the money we're
22 getting out of this to help kind of build the fund that education is something that can give us
23 bigger dividends down the road. He said people will always complain about increases to
24 fees, and that it comes down to explain what they're doing and why they're doing it.

25 **Mayor Gilbert** said there are three members who seem in favor of option one, so
26 there is a majority.

27 **[AGENDA ITEM #2 - [SOLAR AND EV RATE DESIGN]**

28 **Craig Brown, Consultant w/1898 & Co. Part of Burns and McDonnell**, gave an
29 overview of Solar and Electric Vehicle Rate Design.

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DRAFT MINUTES

1 **[SLIDE 1]**



Solar and EV Rate Design



Town of Apex, NC
April 18, 2023

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3 **[SLIDE 2]**



Agenda

- Current Solar Usage and Financial Analysis
- Forecasted Solar Financial Analysis
- Rate Options for Solar Customers
- Rate Options for Residential EV Customers
- Rate Options for Public EV Chargers



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5 **[SLIDE 3]**



Current Solar Usage and Financial Analysis

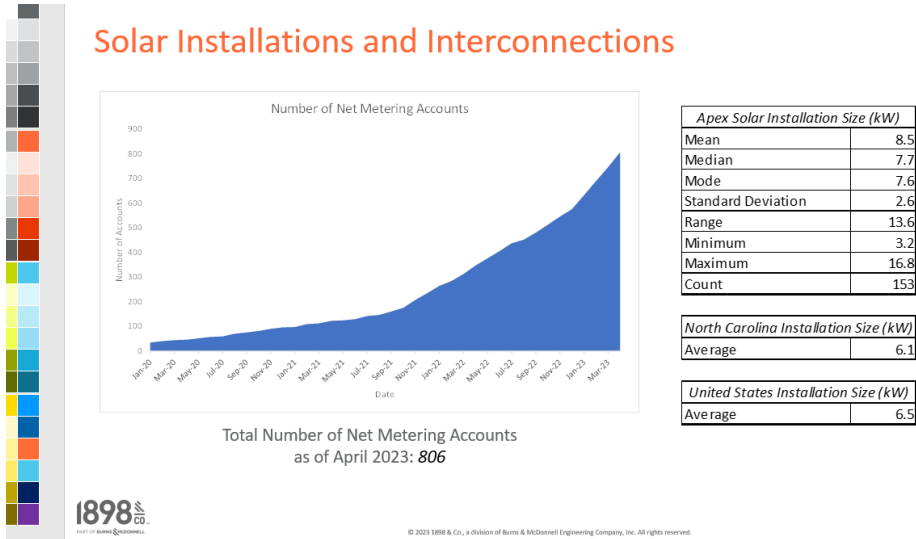
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7 **Councilmember Gantt** said Duke has been in the news recently for votes that were
8 had along these lines, he asked what Duke is doing versus what they do affect us at all.

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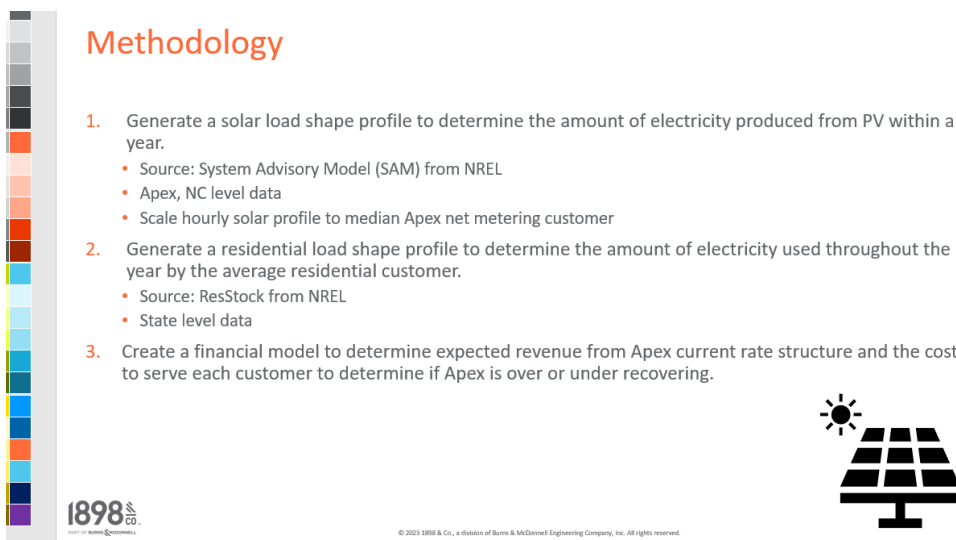
1 **Mr. Brown** said Duke is changing their net near program just from a flat rate like we
2 do now to a time of use-based rate. He said details of that are still being worked out

3 **[SLIDE 4]**



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5 **SLIDE 5]**



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1 [SLIDE 6]

Methodology

4. Add in the solar generation into the financial model to determine the over or under recovery of a customer with solar installed.
5. Identify the coincident peak (CP) of both data sets to estimate impact on power supply costs
6. Model the expected over or under recovery based on the percent of Apex customers that install solar.
 - 10 percent of customer base
 - 20 percent
 - 50 percent



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3 [SLIDE 7]

Solar Generation Heat Map

- Assuming an 8 kW capacity solar system
- Load Shape Source: System Advisory Model (SAM)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12:00:00 AM	-	-	-	-	-	-	-	-	-	-	-	-
1:00:00 AM	-	-	-	-	-	-	-	-	-	-	-	-
2:00:00 AM	-	-	-	-	-	-	-	-	-	-	-	-
3:00:00 AM	-	-	-	-	-	-	-	-	-	-	-	-
4:00:00 AM	-	-	-	-	-	-	-	-	-	-	-	-
5:00:00 AM	-	-	-	-	-	-	-	-	-	-	-	-
6:00:00 AM	-	-	-	-	-	-	-	-	-	-	-	-
7:00:00 AM	-	-	0.02	0.29	0.55	0.66	0.50	0.39	0.17	0.01	-	-
8:00:00 AM	0.05	0.27	0.86	1.40	1.69	1.83	1.50	1.55	1.28	1.07	0.70	0.05
9:00:00 AM	1.21	1.45	2.15	2.74	2.87	3.02	2.63	2.74	2.60	2.52	2.25	1.41
10:00:00 AM	2.15	2.62	3.48	3.96	4.05	4.00	3.55	3.76	3.48	3.28	3.35	2.41
11:00:00 AM	3.17	3.64	4.32	4.83	4.42	4.57	4.07	4.50	4.24	4.00	4.04	3.20
12:00:00 PM	3.56	4.18	4.77	5.13	4.88	4.87	4.41	4.37	4.63	4.01	4.33	3.61
1:00:00 PM	4.04	4.48	5.00	5.27	5.03	4.75	4.54	4.39	4.85	4.12	4.38	3.62
2:00:00 PM	3.87	4.33	4.61	4.95	4.49	4.59	4.57	3.93	4.24	3.88	3.91	3.49
3:00:00 PM	3.36	3.66	3.86	4.36	4.14	3.97	4.12	3.67	4.33	3.38	3.14	2.81
4:00:00 PM	2.32	2.98	2.85	3.17	3.30	3.41	3.36	2.92	2.95	2.31	2.03	1.92
5:00:00 PM	1.18	1.61	1.84	2.02	2.14	2.21	2.37	2.12	1.77	1.08	0.74	0.55
6:00:00 PM	0.02	0.26	0.70	0.84	0.98	1.17	1.19	1.07	0.53	0.03	-	-
7:00:00 PM	-	-	-	0.04	0.16	0.30	0.27	0.13	0.00	-	-	-
8:00:00 PM	-	-	-	-	-	-	-	-	-	-	-	-
9:00:00 PM	-	-	-	-	-	-	-	-	-	-	-	-
10:00:00 PM	-	-	-	-	-	-	-	-	-	-	-	-
11:00:00 PM	-	-	-	-	-	-	-	-	-	-	-	-

<https://sam.nrel.gov/> (Specific to Apex, NC)



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5 [SLIDE 8]

Solar Load Profiles

Hour	Date & Time	Residential 1 (kWh)	Residential with Solar (kWh) SAM	Residential with Solar (kWh) APEX Average	Residential with Solar (kWh) APEX Median	Solar (kWh) SAM	Solar (kWh) APEX Average	Solar (kWh) Apex Median
1	1/1/23 12:00 AM	1.01	1.01	1.01	1.01	0.00	0.00	0.00
2	1/1/23 1:00 AM	1.13	1.13	1.13	1.13	0.00	0.00	0.00
3	1/1/23 2:00 AM	1.18	1.18	1.18	1.18	0.00	0.00	0.00
4	1/1/23 3:00 AM	1.26	1.26	1.26	1.26	0.00	0.00	0.00
5	1/1/23 4:00 AM	1.37	1.37	1.37	1.37	0.00	0.00	0.00
6	1/1/23 5:00 AM	1.52	1.52	1.52	1.52	0.00	0.00	0.00
7	1/1/23 6:00 AM	1.70	1.70	1.70	1.70	0.00	0.00	0.00
8	1/1/23 7:00 AM	1.81	1.81	1.81	1.81	0.00	0.00	0.00
9	1/1/23 8:00 AM	1.73	1.67	1.68	1.68	0.053	0.04	0.05
10	1/1/23 9:00 AM	1.56	1.39	1.42	1.41	0.175	0.14	0.15
11	1/1/23 10:00 AM	1.39	-0.83	-0.37	-0.53	2.216	1.76	1.91
12	1/1/23 11:00 AM	1.24	0.19	0.41	0.34	1.047	0.83	0.90
13	1/1/23 12:00 PM	1.14	-1.13	-0.66	-0.82	2.271	1.80	1.96
14	1/1/23 1:00 PM	1.01	0.63	0.71	0.69	0.379	0.30	0.33
15	1/1/23 2:00 PM	0.84	0.37	0.44	0.39	0.635	0.50	0.55
16	1/1/23 3:00 PM	0.88	0.53	0.62	0.59	0.456	0.36	0.39
17	1/1/23 4:00 PM	1.08	0.97	0.99	0.98	0.117	0.09	0.10
18	1/1/23 5:00 PM	1.23	1.23	1.23	1.23	0.000	0.00	0.00
19	1/1/23 6:00 PM	1.34	1.34	1.34	1.34	0.000	0.00	0.00
20	1/1/23 7:00 PM	1.39	1.39	1.39	1.39	0.000	0.00	0.00
21	1/1/23 8:00 PM	1.41	1.41	1.41	1.41	0.000	0.00	0.00
22	1/1/23 9:00 PM	1.37	1.37	1.37	1.37	0.000	0.00	0.00
23	1/1/23 10:00 PM	1.29	1.29	1.29	1.29	0.000	0.00	0.00
24	1/1/23 11:00 PM	1.15	1.15	1.15	1.15	0.00	0.00	0.00

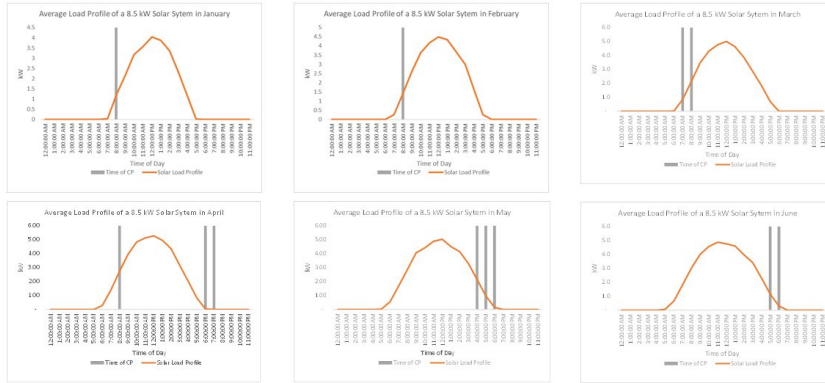


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1 [SLIDE 9]

Solar Load Profile at NCEMPA Coincident Peak (Last 5 Years)



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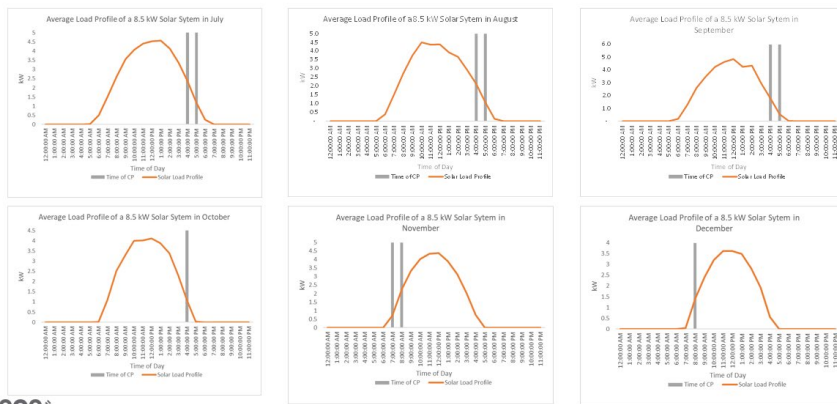
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4 **Assistant Town Manager Stone** asked Mr. Brown to explain how our power bills are
5 made up and the breakdown of costs.

6 **Mr. Brown** said it's based on the concept of demand charges and energy charge, the
7 demand charge is set based on the maximum kilowatt load at the peak, in this case its
8 whenever Duke's system peaks and what the town's load is at an hour that sets your demand
9 charge for the month. Demand charge is going down, it's 21 dollars per kW, it's a very high
10 fixed charge, but energy cost is only 2.689 cents. He said the goal is to incentive people to
11 use less energy during peak hours.

12 [SLIDE 10]

Solar Load Profile at NCEMPA Coincident Peak (Last 5 Years)



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1 [SLIDE 11]



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3 [SLIDE 12]

Revenue and Power Supply Analysis

Description	Residential	Residential with Solar (kWh) APEX Median	Description	Residential	Residential with Solar (kWh) APEX Median
Annual Energy (kWh)	10,581	191	NCEMFA Purchased Power Energy		
Rate Charges			Total Annual Sales	\$ 20,551	\$ 191
Energy Charges	\$ 996.70	\$ 17.97	NCEMFA Energy Rate	\$ 0.0229	\$ 0.0229
Customer Charges	\$ 300.00	\$ 300.00	Annual Energy Charges	\$ 242.19	\$ 4.37
Annual Revenue per Cust	\$ 1,296.70	\$ 317.97	kW Demand During Monthly CP		
			Jan	2.48	1.44
			Feb	2.21	1.97
			Mar	1.65	1.89
			Apr	1.06	1.03
			May	1.35	0.90
			Jun	1.69	0.68
			Jul	1.90	(1.00)
			Aug	1.85	0.02
			Sep	1.45	(1.30)
			Oct	1.02	(0.98)
			Nov	1.47	0.87
			Dec	2.17	2.13
			NCEMFA Demand and Delivery Charge (\$23.58/kW)		
			Jan	\$ 60.57	\$ 57.60
			Feb	\$ 52.00	\$ 46.51
			Mar	\$ 38.91	\$ 38.55
			Apr	\$ 25.00	\$ 24.25
			May	\$ 31.84	\$ 11.84
			Jun	\$ 39.87	\$ 16.07
			Jul	\$ 44.85	\$ (23.64)
			Aug	\$ 43.62	\$ 0.36
			Sep	\$ 34.29	\$ (25.87)
			Oct	\$ 23.86	\$ (23.03)
			Nov	\$ 34.66	\$ 20.44
			Dec	\$ 51.20	\$ 50.14
			Total	\$ 476.77	\$ 193.23
			Share of Other NCEMFA Riders (\$1.48 per month)	\$ 41.76	\$ 41.76
			Total Annual Power Supply Costs	\$ 720.96	\$ 197.59

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5 [SLIDE 13]

Revenue Impact Analysis

Description	Residential	Residential with Solar (kWh) APEX Median
Annual Revenue Per Customer	\$1,296.70	\$317.97
Annual Power Supply Cost Per Customer	\$720.96	\$197.59
Contribution to Apex Distribution and Customer Costs	\$575.74	\$120.37
Under Collection of Dist and Cust Costs per Solar Cust		(\$455.36)
Lost Revenue at Various Solar Customer Levels:		
806 (3.2%)		(\$367,024)
2,500 (10%)		(\$1,138,411)
5,000 (20%)		(\$2,276,822)
12,500 (50%)		(\$5,692,056)

Contribution to Apex costs only 21% of standard residential

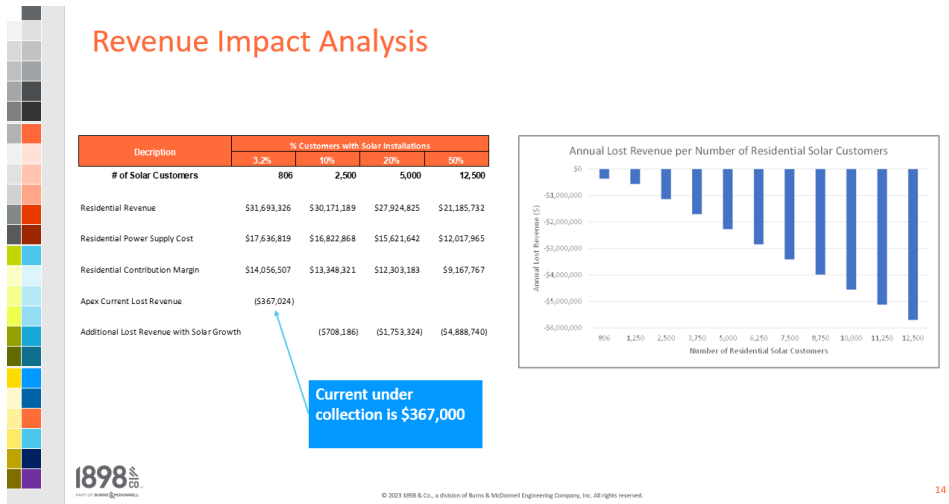
Loss of \$455 per solar customer

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DRAFT MINUTES

1 [SLIDE 14]



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3 Deputy Town Manager Purvis said Apex tends to see people oversize their solar
4 installation for their property.

5 Mr. Brown said the average kW size in Apex was 8.5, while the state average was 6.1.
6 He said this is largely developer driver, as they know this is an attractive are for solar meter
7 rates.

8 [SLIDE 15]



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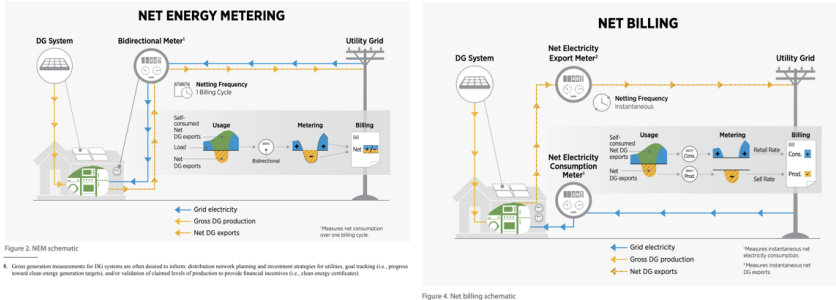
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1 [SLIDE 16]

Net Metering vs Net Billing



Source: NREL Grid-Connected Distributed Generation: Compensation Mechanism Basics

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3 [SLIDE 17]

Net Metering with Fixed Customer and Distribution Charges

Description:

- The customer is charged an energy charge (\$/kWh) along with a fixed customer charge (\$/month) and distribution charge (\$/month). The energy charge is determined with a customer who has a bidirectional meter. The bidirectional meter works by increasing energy count when electricity is used from the grid and subtracts energy count when excess solar energy is sent back to the utility's grid.

PROS

- Receive a guaranteed monthly revenue stream to help cover customer and distribution charges
- More fair and equitable to non-solar rate payers

CONS

- Harms the expected payback of solar systems
- To recover all customer and distribution costs, the fixed portion must be quite large
- Solar customers electric bill would be significantly greater than the current rate structure.



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5 [SLIDE 18]

Net Metering with Fixed Customer and Distribution Charges

Existing Bill Structure				Net Metering with Fixed Customer and Distribution Charges Bill Structure			
Residential	Billing Units	Rate	Total \$	Residential	Billing Determinants	Rate	Total \$
Energy Charges				Energy Charges			
Total Energy Charges	(100) kWh	\$ 0.0942	\$ (9.42)	Total Energy Charges	(100) kWh	\$ 0.0850	\$ (8.50)
Customer Charge	1 month	\$ 25.00	\$ 25.00	Customer Charge	1 month	\$ 20.00	\$ 20.00
Distribution Charge	1 month	\$ 24.00	\$ 24.00	Distribution Charge	1 month	\$ 24.00	\$ 24.00
Total Charges			\$ 15.58	Total Charges			\$ 35.50



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DRAFT MINUTES

1 [SLIDE 19]

Net Metering with NCP or CP Demand and Energy Charges

Description:

- The customer is charged an energy charge (\$/kWh) for the power supply portion along with a distribution demand charge (\$/kW) that is based on NCP or a larger demand charged based on CP with a lower energy charge.

PROS

- Cost based recovery of distribution costs
- Receive a more consistent monthly revenue stream
- More fair and equitable to non-solar rate payers

CONS

- Won't recover all power supply CP demand costs in most months
- Must educate residential customers on how demand charges work
- More advanced metering and billing system requirements



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3 [SLIDE 20]

Net Metering with NCP or CP Demand and Energy Charges

Net Metering with Demand and Energy Charges Bill Structure

Existing Bill Structure

Residential	Billing Units	Rate	Total \$
Energy Charges			
Total Energy Charges	(100) kWh	\$ 0.0942	\$ (9.42)
Customer Charge			
Customer Charge	1 month	\$ 25.00	\$ 25.00
Total Charges			\$ 15.58

Residential	Billing Units	Rate	Total \$
Energy Charges			
Total Energy Charges	(100) kWh	\$ 0.0850	\$ (8.50)
Customer Charge			
Customer Charge	1 month	\$ 25.00	\$ 25.00
Dist Demand Charge			
Dist Demand Charge	2.00 kW	\$ 4.50	\$ 9.00
Total Charges			\$ 25.50

Residential	Billing Determinants	Rate	Total \$
Energy Charges			
Total Energy Charges	(100) kWh	\$ 0.0500	\$ (5.00)
Customer Charge			
Customer Charge	1 month	\$ 25.00	\$ 25.00
CP Demand Charge			
CP Demand Charge	0.00 kW	\$ 18.00	\$ -
Total Charges			\$ 20.00



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5 [SLIDE 21]

Net Metering with Time-of-Use Energy Charges

Description:

- The customer is charged an energy charge (\$/kWh) that fluctuates based on a Time-of-Use (TOU) Rate. This can be paired with a demand charge. On-peak exports can only offset (be netted with) on peak usage. Off peak exports are offset with off peak usage.

PROS

- Customers compensation is aligned better with system hourly costs
- More fair and equitable to non-solar rate payers

CONS

- Does not address recovery of distribution costs
- More advanced metering and billing system requirements



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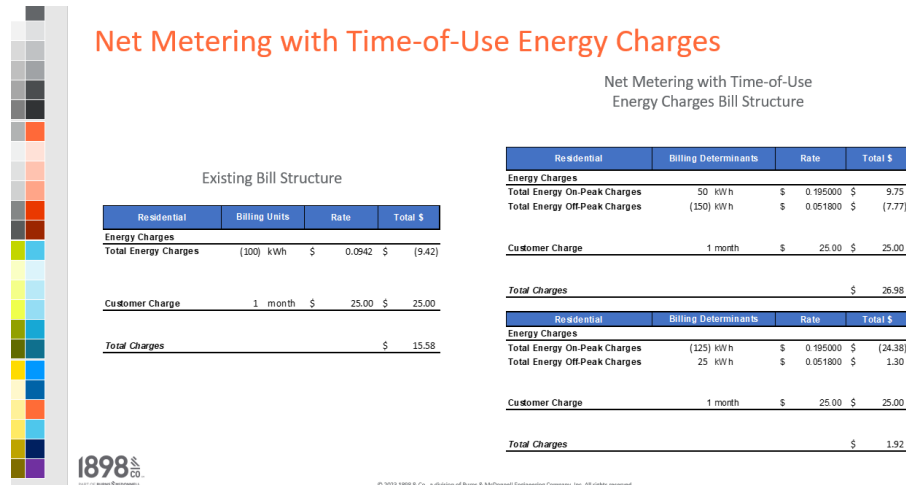
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DRAFT MINUTES

1 **Councilmember Zegerman** asked to explain what Non-Coincident (NP) peak is.

2 **Mr. Brown** said regardless of the system, the individual customers' peak for the
3 month is the Non-Coincident Peaker. Coincident Peak (CP) is a customer's peak at the time of
4 the case.

5 **[SLIDE 22]**



6

7

8 **Councilmember Gantt** said the best case for Apex solar customers is to have their
9 panels pointed toward the sun in the morning in the winter and in the evening try to capture
10 the sun before it goes down in the summer. He said he would incentivize that option to lower
11 the costs for everybody because of the peak.

12 **Mr. Brown** said it doesn't have to be just for solar customers, this can be transformed
13 to all residential customers so everyone is in the same boat.

14 **Councilmember Zegerman** asked are we using differentiated rates for on and off-
15 peak rates.

16 **Mr. Brown** said it's an option.

17 **Councilmember Gantt** asked if the meter shortage is temporary.

18 **Director Neumann** said the current system that reads the meters is now un-
19 expandable and it doesn't cover certain areas. He said there are a few meters that are being
20 saved for commercial customers only.

21 **Councilmember Zegerman** asked if it's single rates.

22 **Mr. Brown** said yes, currently now everything is at nine and a half cents.

23 **Councilmember Zegerman** said he thinks there is an education issues around
24 getting this information out as well.

25

26

DRAFT MINUTES

1 [SLIDE 23]

Net Billing with Value of Solar (VOS) Rate

Description:

- Rate specifically for compensating solar customers for energy exported to the grid (\$/kWh) under a net billing approach.
- Common Value of Solar Rate Components:
 - Avoided generation energy costs
 - Avoided generation demand costs
 - Avoided transmission demand costs
 - Avoided distribution demand costs
 - Distribution system deferred capital investment
 - Cost of integrating additional solar into the distribution system
 - Environmental attributes (RECs)
 - Other environmental considerations



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23

3 [SLIDE 24]

Net Billing with Value of Solar (VOS) Rate

PROS

- Best represents the true avoided costs of energy produced from solar customers to the utility
- Most fair rate structure for all rate payers
- Can set the value of renewable attributes for your system

CONS

- Solar customers would get compensated less than the current rate structure
- More advanced metering and billing system requirements



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24

5 [SLIDE 25]

Net Billing with Value of Solar (VOS) Rate

Existing Bill Structure

Residential	Billing Units	Rate	Total \$
Energy Charges			
Total Energy Charges	(100) kWh	\$ 0.0942	\$ (9.42)
<hr/>			
Customer Charge	1 month	\$ 25.00	\$ 25.00
<hr/>			
Total Charges			\$ 15.58

Net Billing with Value of Solar Bill Structure

Residential	Billing Units	Rate	Total \$
Energy Charges			
Total Energy Delivered from the Grid Charges	100 kWh	\$ 0.0942	\$ 9.42
Total Energy Exported to the Grid Credit	(200) kWh	\$ 0.0550	\$ (11.00)
<hr/>			
Customer Charge	1 month	\$ 25.00	\$ 25.00
<hr/>			
Total Charges			\$ 23.42



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25

DRAFT MINUTES

1 [SLIDE 26]

Net Billing with TOU Rates

Description:

- Customers are compensated for excess solar sent to the utility grid equal to the time-of-use rate structure.
- Similar to current bilateral TOU

PROS

- More accurate way of passing on avoided cost
- Pairs well with the existing energy rate charged to the customer so the customer understands why they are being compensated at different levels.

CONS

- Solar customers would get paid less than the current rate structure
- More complicated rate structure
- Requires meter capable of bi-directional metering



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2 [SLIDE 27]

Net Billing with TOU Rates

Existing Bill Structure

Residential	Billing Units	Rate	Total \$
Energy Charges			
Total Energy Charges	(100) kWh	\$ 0.0942	\$ (9.42)
Customer Charge			
Customer Charge	1 month	\$ 25.00	\$ 25.00
Total Charges			\$ 15.58

Net Billing with TOU Rates Bill Structure

Residential	Billing Determinants	Rate	Total \$
Energy Charges			
Total Energy Delivered from the Grid On-Peak Charges	25 kWh	\$ 0.1950	\$ 4.88
Total Energy Delivered from the Grid Off-Peak Charges	75 kWh	\$ 0.0518	\$ 3.89
Total Energy Exported to the Grid On-Peak Credit	(50) kWh	\$ 0.1303	\$ (6.52)
Total Energy Exported to the Grid Off-Peak Credit	(150) kWh	\$ 0.0310	\$ (4.65)
Customer Charge			1 month \$ 25.00 \$ 25.00
Total Charges			\$ 27.25



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3 [SLIDE 28]

Duke Energy Net Metering Policy

Duke Energy will be switching from a flat credit to a Time-of-Use credit for solar net metering compensation.

- Approved by the North Carolina Utilities Commission on March 23, 2023
 - Docket NO. E-100, SUB 180
 - <https://starw1.ncuc.gov/NCUC/ViewFile.aspx?id=1452268d-1905-4d1e-a5c8-a9e84351e53a>
- Net metering changes for existing customer won't take place until 2027
- Still awaiting details as to how the TOU rate will be structured



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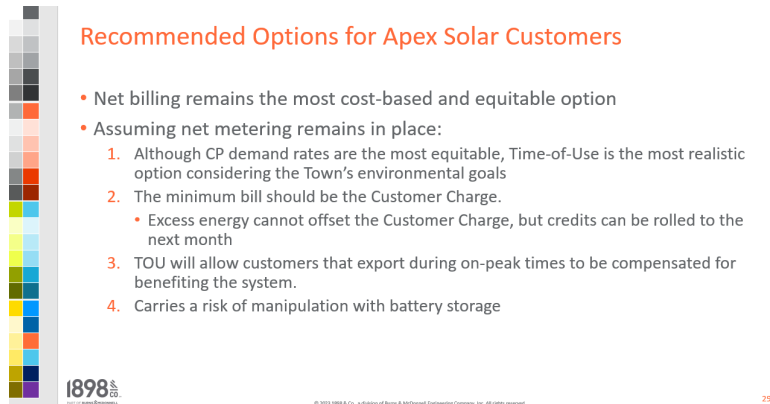
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DRAFT MINUTES

1 **Councilmember Gantt** asked if the cost structure in place with the peak being much
2 higher than the regular is reflective of how much it costs to produce energy.

3 **Mr. Brown** said yes, the town pays the same rate as all their wholesalers. It is a formula
4 rate that's updated every year.

5 **[SLIDE 29]**



Recommended Options for Apex Solar Customers

- Net billing remains the most cost-based and equitable option
- Assuming net metering remains in place:
 1. Although CP demand rates are the most equitable, Time-of-Use is the most realistic option considering the Town's environmental goals
 2. The minimum bill should be the Customer Charge.
 - Excess energy cannot offset the Customer Charge, but credits can be rolled to the next month
 3. TOU will allow customers that export during on-peak times to be compensated for benefiting the system.
 4. Carries a risk of manipulation with battery storage

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6
7 **Councilmember Gantt** asked if it will encourage investment in battery storage.

8 **Mr. Brown** said yes.

9 **Councilmember Zegerman** asked to clarify the hours of peak hours.

10 **Councilmember Mahaffey** said the peak is the peak when the sun is out at its highest
11 around noon, but the peak usage is at 4 p.m.

12 **Councilmember Zegerman** said the town still has the fixed costs of all our
13 distribution, he said if you net zero or not you rely on the grids and asks if \$25 will cover all
14 that.

15 **Mr. Brown** said, no, it covers the customer piece.

16 **Mayor Pro Tempore Killingsworth** asked if it's on the down slope when they're
17 providing some offset to the peak charge with our demand charge, is that showing cost
18 difference.

19 **Mr. Brown** said it actually captures the negative number of power supply where
20 they're actually contributing and getting paid for that demand by almost by lowering the
21 system average.

22 **Councilmember Gantt** asked if time use is the only thing offered, what would the
23 number be.

24 **Mr. Brown** said that's the next step in the process is trying to figure out where it goes.

25 **Councilmember Gantt** asked how would adding in heat pumps in Apex over the next
26 10 years effect this.

DRAFT MINUTES

1 **Mr. Brown** said it's beneficial because it adds winter kilowatt hour sales which
2 increase the overall load factor for the system. He said it's good for the overall system load
3 factor, but if its in line with your coincident peak it can be harmful.

4 **Councilmember Gantt** said this would maybe increase usage on peak usage on
5 winter mornings.

6 **Mr. Brown** said yes.

7 **Councilmember Mahaffey** said we have the most solar friendly policy in North
8 Carolina. He said Duke is making their changes in 2027 not in 2024. He said there is an
9 opportunity here to see what happens with Duke and learn from that and see what the
10 impacts are. He said he cares about total revenue versus the subsidy amount, and wants to
11 look at that ratio. He said currently energy bills are about 1% higher than they would be, due
12 to the solar incentives put in place for customers who use that. He said there needs to be a
13 decision made on what that number would be before they felt it was too unfair for the
14 customers paying the regular rate. He said he feels it is appropriate to put a policy in place
15 that drives solar adoption, up to the point that solar adoption level is substantial enough or
16 the standard rate becomes too high because of the subsidy. He said there are several things
17 they can do if the solar subsidy is getting too expensive.

18 **Town Manager Crosby** said she wanted to clarify that all the customers that are
19 being charged are getting credits back. She asked if the customer will get the 25-dollar fee
20 that's all captured or is the town keeping it the way it is.

21 **Councilmember Mahaffey** said he is okay paying people to get solar panels. He
22 wants them to get solar panels. He said he wants to see the solar adoption of Apex to a point
23 where people notice solar panels everywhere. He said once that's done there is no need to
24 subsidize anymore and then if costs get too much where everyone's bills are above a certain
25 percent then that would be unfair then it would have to be changed at that point. He said
26 there are ways to make sure it doesn't get to 5 percent or 10 percent. He said time of use was
27 presented long term and is absolutely the right thing to do because there are other policy
28 benefits that have an economic impact. He said he would like to wait to see what Duke
29 Energy does because he wants to do it better than Duke.

30 **Mayor Gilbert** asked how many ElectriCities municipalities are using the same model
31 Apex does.

32 **Mr. Brown** said Clayton wants to be similar to Apex. He said Greenville has three
33 options, they are less solar friendly. He said they have a net billing option, buy and sell
34 option, they have a net metering option with a demand charge.

35 **Councilmember Gantt** asked if time of use can be the only choice.

36 **Mr. Brown** said that's where he thinks the town should go and make this a mandatory
37 rate for all residential customers.

DRAFT MINUTES

1 **Councilmember Gantt** said he thinks the solar adoption curve is going to be ramping
2 up quickly, and in turn so will the increase to the non-solar energy billing per customer.

3 **Councilmember Mahaffey** said he didn't think it would be that quick, as not all
4 homes would be suitable for solar adoption. He said his feedback is he doesn't want to make
5 any drastic change today. He said the key number is the revenue loss and he wants to track
6 certain points it reaches because he wants to make a policy change.

7 **Mayor Pro Tempore Killingsworth** said she would like to look at all of these other
8 policy change options as part of the recommendation. She said she doesn't want to make any
9 changes until AMA goes online and the exact numbers are out to know how much to offset
10 were getting and not estimates.

11 **Councilmember Zegerman** asked what is the timeline.

12 **Assistant Town Manager Stone** said hopefully the town will get the contract in May.
13 He said the first thing that has to happen is they start with our infrastructure building for the
14 meters, and having our meters Apex specific. He said then there is a pilot program to make
15 sure everything is working. It would be a solid year before the phase actually started.

16 **Mayor Gilbert** asked if it was a possibility to raise electric rates. He said some people
17 can't afford the solar, and it does impact a large number of residents. He said he has to speak
18 on behalf of the residents that can't continue to afford the rate increases.

19 **Councilmember Gantt** said he thinks time of use should be used for everybody
20 anyway and it's a bonus that it helps with the solar incentives.

21 **Councilmember Mahaffey** said he agrees, but it's impractical to have everyone go to
22 time of use. He said it's actually a lifestyle change to save money, but if nothing is changed,
23 time of use would be a big bill increase.

24 **Councilmember Gantt** said it should be a gradual switch.

25 **Mr. Brown** said it's also a marketing plan. He said they would need to educate their
26 customers. He added that in the first year of implementing something like these where
27 customers could potentially change habits to save money on time of use, they could see how
28 their electric bill changes over that first year, but still pay the original rate if time of use ended
29 up being higher, in order to provide a sort of buffer period.

30 **Director Grogan** said they talked about piloting the possible rates out to people in
31 order to educate people on the options and get public feedback.

32 **Councilmember Zegerman** said the rates can be changed over time.

33 **Director Neumann** explained how the rates have changed over the years and how
34 rates are going now. He said the current rates do not disincentivize people from using energy
35 at peak hours. He said demand is the most important factor. He said if people could be
36 incentivized to use less energy during peak time either through CP or time of use rates, the
37 town can reduce energy bills drastically. He said the problem is they're trying to recover

DRAFT MINUTES

1 energy cost through a variable that isn't related to how they are being billed. He said EV
2 chargers and solar are messing with the way that cost used to be recovered.

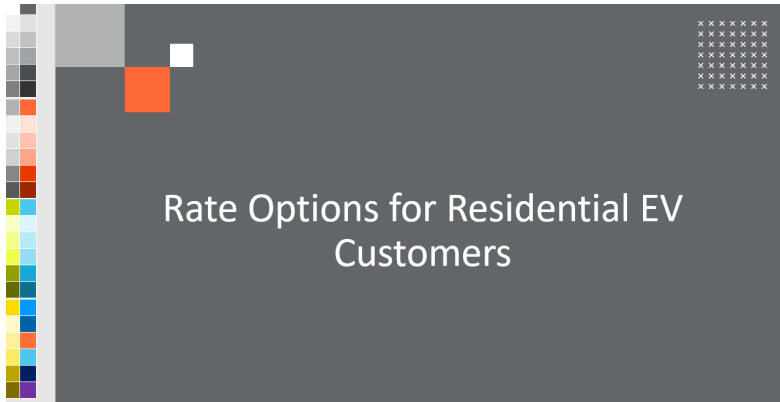
3 **Mayor Pro Tempore Killingsworth** asked if we have someone who is looking at the
4 numbers so the town can recover more accurately.

5 **Mr. Brown** said it's less risky to have the flat CP rate rather than using time of use,
6 because of time of use has to have the proper timing of peak hours, and that can end up not
7 working out if the peaks aren't aligned.

8 **Director Neumann** said unfortunately the town is stuck with Duke Energy's peak that
9 we don't know about until the month closes. He said the morning time is good to turn on
10 generators for an hour or two before the peak is going to hit. He said the entire load
11 management program needs to be overhauled. He said he would like to mandate
12 participation, or charge people at a different rate.

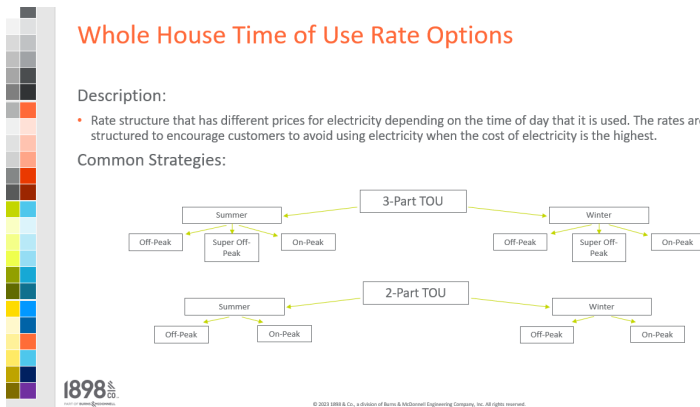
13 **Councilmember Mahaffey** said it seemed important to get people to not be
14 charging EVs during Peak Hours.

15 **[SLIDE 30]**



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17 **[SLIDE 31]**



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DRAFT MINUTES

1 [SLIDE 32]


Whole House Time of Use Rate Options

PROS

- Positive impact on system peak
- Customer has opportunity to lower bills
- Super off-peak option promotes mutually beneficial EV charging
- Can be applied to all customers
- Only one meter required

CONS

- Low participation if opt in
- Potential negative customer reaction if mandatory
- Requires customer education



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3 [SLIDE 33]

Whole House Time of Use Rate Options

Super off-peak charging

Whole House 3-Part TOU Rates Bill Structure

Existing Bill Structure


Residential	Billing Units	Rate	Total \$
Energy Charges			
Total Energy Charges	1,500 kWh	\$ 0.094200	\$ 141.30
Customer Charge	1 month	\$ 25.00	\$ 25.00
Total Charges			\$ 166.30

Summer On-Peak Hours: 3:00pm – 7:00pm
Winter On-Peak Hours: 6:00 am – 10:00 am
Super Off-Peak Hours: 11:00 pm – 6:00 am

Residential	Billing Units	Rate	Total \$
Energy Charges			
Energy On-Peak Charges	250 kWh	\$ 0.1950	\$ 48.75
Energy Off-Peak Charges	800 kWh	\$ 0.0650	\$ 52.00
Energy Super Off-Peak Charges	450 kWh	\$ 0.0300	\$ 13.50
Customer Charge	1 month	\$ 25.00	\$ 25.00
Total Revenue			\$ 139.25

Residential	Billing Units	Rate	Total \$
Energy Charges			
Total Energy Received On-Peak Charges	600 kWh	\$ 0.1950	\$ 117.00
Total Energy Received Off-Peak Charges	800 kWh	\$ 0.0650	\$ 52.00
Total Energy Received Super Off-Peak Charges	300 kWh	\$ 0.0300	\$ 9.00
Customer Charge	1 month	\$ 25.00	\$ 25.00
Total Revenue			\$ 197.00

On-peak charging



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4
5 **Councilmember Mahaffey** asked if there were ways to tell how many EVs or being
6 charged or who had them

7 **Mr. Brown** said they could get data analysts to find patterns in large spikes which can
8 show peak hours and can extrapolated to determine large energy-use items such as EVs

9 **Councilmember Mahaffey** said the important thing is to show people the
10 comparison over a period of time for on-peak versus off-peak rates.

11 **Director Neumann** said the town needs to look at the customers its going to affect
12 and educate them.

13 **Councilmember Mahaffey** said that once the AMI came in, they could see the
14 customers who contribute the most to on-peak usage, and communicate directly with them
15 about potentially changing their energy use habits to lower their bill significantly and
16 decreased the overall peak usage.

17 **Director Neumann** said once they get the systems in to capture and utilize this data,
18 they can work with the customers with high energy usages and help them work on that.

19 **Councilmember Mahaffey** said he's looking more of a direct outreach to the people
20 as it could likely change their behavior if someone tells them how to save money. He

DRAFT MINUTES

1 suggested a pilot program where people can “trial” a time of use program where they would
 2 be charged the lower of the two between flat rate and time of use. He said this is
 3 complicated, and it would be difficult to get people to fully understand this.

4 **[SLIDE 34]**

Coincident Peak Demand Rate


Description:
 Residential customers pay a demand charge based on the amount of kW load being used during the system wide CP in addition to the customer charge and energy charge.

PROS

- Can significantly reduce residential electric demand during the CP
- More accurate revenue generation based on COS
- One-meter

CONS

- Could significantly increase a customer bill
- A system needs to be installed to inform the customer of a possible peak



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6 **[SLIDE 35]**

Coincident Peak Demand Rate

Existing Bill Structure


Residential	Billing Units	Rate	Total \$
Energy Charges			
Total Energy Charges	1,500 kWh	\$ 0.0942	\$ 141.30
Customer Charge	1 month	\$ 25.00	\$ 25.00
Total Charges			\$ 166.30

Coincident Peak Demand Rate Bill Structure

Residential	Billing Units	Rate	Total \$
Energy Charges			
Total Energy Charges	1,500 kWh	\$ 0.0560	\$ 82.50
Customer Charge	1 month	\$ 25.00	\$ 25.00
Demand Charge	7.00 kW	\$ 15.00	\$ 105.00
Total Charges			\$ 212.50

Residential	Billing Units	Rate	Total \$
Energy Charges			
Total Energy Charges	1,500 kWh	\$ 0.0560	\$ 82.50
Customer Charge	1 month	\$ 25.00	\$ 25.00
Demand Charge	1.00 kW	\$ 15.00	\$ 15.00
Total Charges			\$ 122.50

Minimizes load during CP



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8 **[SLIDE 36]**


Separately Metered Charger Rate Options

Description:

- A second meter is installed at the residential customers property, usually at the expense of the utility, for the purpose of specifically measuring electrical demand and usage for EV Charging. This allows for the utility to implement an EV specific TOU or demand charge. Since EV charging can be programmed, customers are more willing to participate knowing that they can consistently avoid on-peak charges.

EV Time-of-Use:

- Rate structure that has different prices for electricity depending on the time of day that it is used. The rates are structured to encourage customers to avoid using electricity when the cost of electricity is the highest.
 - Second meter that is only connected to the EV charger.
 - Higher participation than whole house TOU rates.
 - More extreme rate spreads compared to whole house TOU rates.



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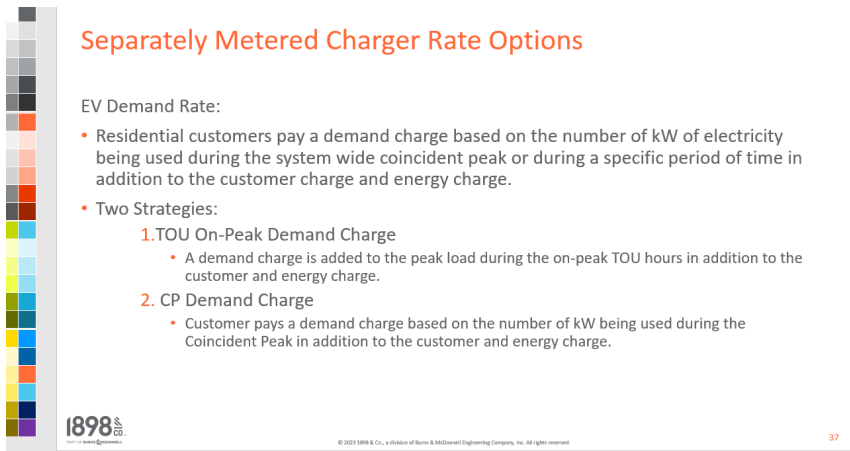
1 **Councilmember Zegerman** asked what is the benefit of having a separate meter
2 compared to load management

3 **Mr. Brown** said it gives the customer more control, and that they don't have to
4 expose their entire house to time of use. He said load management works well, but has a
5 higher administrative burden.

6 **Councilmember Mahaffey** said he would want to hook up as many things as possible
7 to a time of use system knowing what the advantages and timings are. asked how
8 implementable is EV Chargers, and if permits are required.

9 **Assistant Town Manager Stone** said if customers are getting a 240 Volt Plug-In. they
10 are supposed to get a permit. He said once we have AMI, that will show who has them.

11 [SLIDE 37]



Separately Metered Charger Rate Options

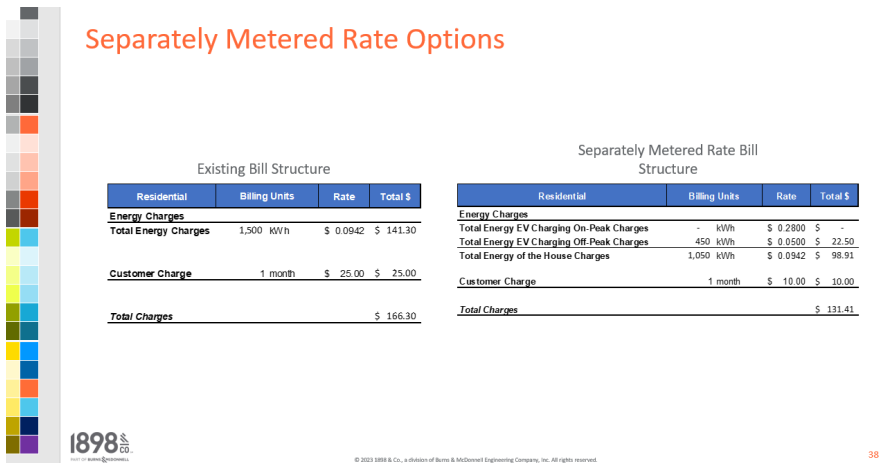
EV Demand Rate:

- Residential customers pay a demand charge based on the number of kW of electricity being used during the system wide coincident peak or during a specific period of time in addition to the customer charge and energy charge.
- Two Strategies:
 - TOU On-Peak Demand Charge**
 - A demand charge is added to the peak load during the on-peak TOU hours in addition to the customer and energy charge.
 - CP Demand Charge**
 - Customer pays a demand charge based on the number of kW being used during the Coincident Peak in addition to the customer and energy charge.

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13 [SLIDE 38]



Separately Metered Rate Options

Residential	Billing Units	Rate	Total \$
Energy Charges			
Total Energy Charges	1,500 kWh	\$ 0.0942	\$ 141.30
Customer Charge			
	1 month	\$ 25.00	\$ 25.00
Total Charges			\$ 166.30

Residential	Billing Units	Rate	Total \$
Energy Charges			
Total Energy EV Charging On-Peak Charges	450 kWh	\$ 0.2800	\$ 126.00
Total Energy EV Charging Off-Peak Charges	450 kWh	\$ 0.0500	\$ 22.50
Total Energy of the House Charges	1,050 kWh	\$ 0.0942	\$ 98.91
Customer Charge			
	1 month	\$ 10.00	\$ 10.00
Total Charges			\$ 131.41

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DRAFT MINUTES

1 [SLIDE 39]



Recommendation for Home EV Charging

- Any rate with a CP demand charge will always be the most cost based and equitable rate structure.
- Most reasonable option for Apex:
 - Whole House 3-part TOU design
 - On-peak for CP hours, Off-peak, Super Off-Peak for EV Charging
- Can be applied to all residential customers as a mandatory or opt-out rate
- Eliminates need for end-use rates – works for solar and EV
- Promotes responsible behavior for all customers



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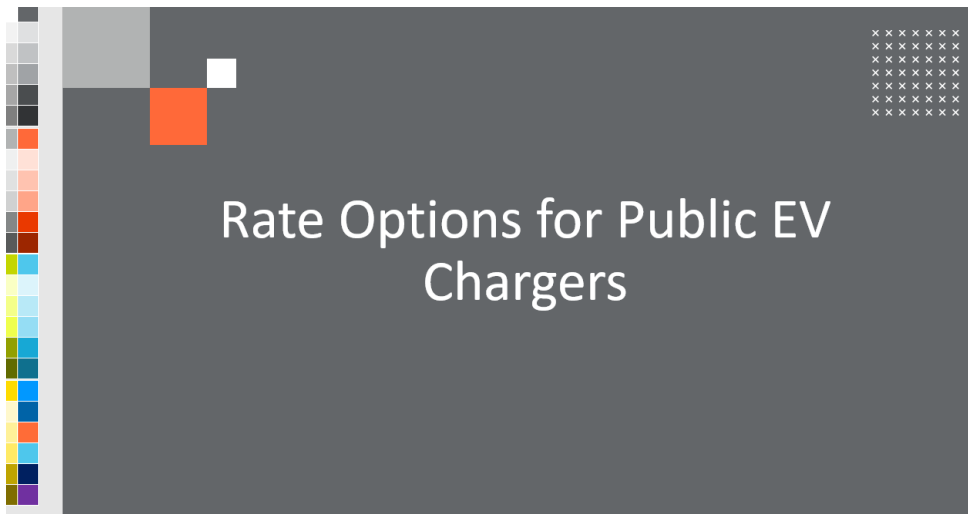
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3 **Director Neumann** said the CP rate guarantees that the town captures the peak
4 period, and if the system goes to time of use, there may be occasions where peak is going to
5 float into a period that wasn't covered. He said the impact on this would be significant. He
6 said usually the highest demands are going to be in the same time of year and day, but
7 there's still risk that it wouldn't be. He said the CP rate guarantees no risk.

8 **Councilmember Mahaffey** said the risk is pushed to the customer and they would
9 get a high bill. He said he thinks it's appropriate for the town to take on the risk and mitigate
10 all customers so no one suddenly gets a high bill.

11 [SLIDE 40]



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DRAFT MINUTES

1 **[SLIDE 41]**

Characteristics of Public EV Chargers

Level 2 chargers

- Typical for home or local commercial use
- 240 V connection
- Charge at 5-10 kW



Direct-current fast charger (DCFC)

- Also known as Level 3 chargers
- 480 V 3-phase power
- Charge at 50-350 kW
- Currently more typical in transportation corridors



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3 **Councilmember Gray** gave his perspective since he owns a Tesla. He said if he plugs
 4 his car into an ordinary plug he would add five miles every one hour, if he plugs it in a home
 5 charger he would add 40 miles, and if he goes to a Tesla supercharger that's operating at
 6 350 kilowatts he would add 300 miles every half hour. He said the middle ground is the level
 7 2 charger.

8 **[SLIDE 42]**

Considerations for Apex Related to NCEMPA Power Supply Rate Structure

Coincident peak demand charges are highly impacted by DCFC.

- It is imperative that DCFC rates be designed to avoid or recover demand costs
- If both chargers are being used for 30 minutes in the CP hour:
 - Power supply cost - \$7,648
 - Revenue @ LGS rate - \$3,726
- Does not include the cost of the charger if Town owned

Two 180 kW Chargers at Kohls	
Demand (kW)	360.00
Load Factor	10%
Monthly Energy @ 10% LF	26,280
Coincidence w/ NCEMPA Peak	100%
NCEMPA Demand (\$/kW CP)	
Billed Demand	\$21.17
Delivery	\$0.06
	\$21.23
Demand Cost per kWh	
	\$0.2908
NCEMPA Energy (\$/kWh)	
	\$0.02673
Monthly NCEMPA Demand & Energy Costs	
Demand	\$7,642.80
Energy	\$702.46
Total	\$8,345.26
Bundled Rate per kWh	
Average Power Supply \$/kWh	\$0.318
Apex Distribution and Fixed Power Supply	\$0.030
Charger Capital Cost Recovery	\$0.000
Total Rate	\$0.348
On-Peak Rate (\$/kWh)	\$0.348
Off Peak Rate (\$/kWh)	\$0.057



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DRAFT MINUTES

1 [SLIDE 43]

Current Apex Public Chargers

Charger Description		Billing Units			NCEMPA Power Supply Costs		Revenue	
		Avg kW Peak	Avg kWh	Load Factor	Demand	Energy	Total Cost	Total Billed
					\$ 21.17	\$ 0.02689		
EV Charger - Saunders 1 - Public	On Peak	41.4	392	6.3%	\$ 10,513.45	\$ 126.63	\$ 11,516.19	\$ 365.63
	Off Peak	43.5	1,652	6.5%		\$ 532.99	\$ 532.99	\$ 1,559.33
EV Charger - Hunter 1 - Public	Total	5.3	89	2.3%		\$ 28.80	\$ 28.80	\$ 85.44
EV Charger - Hunter 2 - Public	Total	3.9	71	2.5%		\$ 22.75	\$ 22.75	\$ 69.68
EV Charger Saunders 2 - Public	On Peak	12.6	379	20.1%	\$ 3,199.98	\$ 122.43	\$ 3,589.08	\$ 367.56
	Off Peak	12.9	2,103	28.1%	\$ -	\$ 678.65	\$ 678.65	\$ 1,974.84
					\$ 13,713.43	\$ 1,512.24	\$ 16,368.45	\$ 4,422.49

- When chargers are used on-peak and hit the CP, the power supply cost alone is nearly 4 times the revenue received
- This is before any contribution to Apex distribution or customer costs

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3 [SLIDE 44]

Time-of-Use (TOU) Energy Rates for Public EV Chargers

Description:

High differential TOU rates to capture CP demand costs in the on-peak period
Appropriate for public Level 2 chargers

PROS

- Better cost recovery method compared to a flat rate
- Encourages the EV charger owners to charge EV drivers in a similar manner
- Can incorporate seasonality

CONS

- Many EV drivers will still charge even with the higher price
- The EV charger owners still do not have to charge the EV drivers a TOU rate
- On peak periods must be synced with CP

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5 [SLIDE 45]

Coincident Peak Demand Rates

Description:

The Town's current LGS CP rate is ideal for cost recovery of high demand, low load factor electric loads.
Rate includes CP demand charge, NCP excess demand charge and energy charge.

PROS

- Accurately recover costs from public chargers that have high capacity with historically low load factors
- Strongly encourages EV charger owners to charge EV drivers in a way to avoid the CP.
- Based on existing Apex rate

CONS

- Has the potential to greatly increase the electric bill of the owner of the EV chargers if they allow charging during the CP
- Relies on owner of charger to control peak demand usage

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1 [SLIDE 46]



TOU Energy with On-peak Demand Rates

Description:

Blend of prior two concepts – CP demand costs can be spread across the on-peak energy charge and have a lower CP demand charge – moderating both charges somewhat

PROS

- Accurately recover costs from public chargers that have high capacity with historically low load factors
- Strongly encourages EV charger owners to charge EV drivers in a way to avoid the CP.
- Can incorporate seasonality

CONS

- Has the potential to greatly increase the electric bill of the owner of the EV chargers if they allow charging during the CP
- Relies on owner of charger to control peak demand usage



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3 [SLIDE 47]



Bundled Rates with Load Control

Description:

- A bill credit for a portion of the demand rate in exchange for the utility to be able to turn-off or reduce charging capacity during coincident peak events.
- Typically, utilities can declare 20 critical peak events each year that lasts for 2-4 hours.
 - Apex would need to call every month at the CP

Typical Structure:

- Can start from a more traditional rate
- Incentive paid on a per kW basis
- Level 2 or DCFC



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6 **Councilmember Gray** usually people who plug in at an EV charger do so because
7 they are on critically low battery. He said since they charge so slow, there's no advantage to
8 using it over one at home He added that the ones on Saunders get a lot of traffic because
9 people can plug in during meals, but even then, they can only add about 20 miles to their
10 range during a meal. He noted that for him as an EV owner, the number one problem and
11 deterrent is the risk of pulling up to a charger and having it not work.

12 **Mr. Brown** said level 2 public chargers could be on time of use, but any business
13 who adopts the level 3 DCFC charger should be mandated to be on the CP rate, in his
14 opinion. He said the CP rate changes monthly in line with the peak, but can't really be
15 predictable. He said if the CP rate was expanded, they would likely need to be good
16 communication with customers to inform them of the possibility of a certain day being on a
17 CP rate.

DRAFT MINUTES

1 **Councilmember Zegerman** asked how to explain to a customer why their rates
2 changed and they got an unexpectedly high bill if they started charging 10 minutes before 8,
3 then left it on until 8:30.

4 **Mr. Brown** said the expected rates throughout the day shown on the chargers, they
5 would stay consistent throughout each season and people would have a much better idea of
6 what to expect.

7 **Councilmember Mahaffey** said he would want to incentivize private EV station
8 operators to utilize a much higher charging rate.

9 **[SLIDE 48]**

Summary and Recommendation for Public EV Chargers

Public EV Chargers have very low utilization rates, especially in common areas.

EV Chargers present a huge financial risk for the Town without properly designed rates to recover the NCEMPA CP demand costs and distribution system costs

Recommendations:

- Level 2 Public Chargers – Time-of-Use Energy rates acceptable, but LGS CP rate preferred
- Level 3 DCFC – Mandatory LGS CP rate
 - Can be for whole account or separately metered DCFC only

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11 **[SLIDE 49]**

Questions and Discussion

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13 **Mayor Gilbert** asked if a decision needs to be made or if this is for information only.

14 **Councilmember Mahaffey** asked did Council want to try the three-tier time use
15 policy, he said he doesn't want to make it mandatory but nothing is stopping from trying it
16 out.

17 **Mr. Brown** suggested to do the certified pilot program this year and they could
18 design the rate.

DRAFT MINUTES

1 **Director Grogan** said these are decisions she needs for the budget. She said right
2 now at a minimum the town is going to have a four percent increase for electric. She said an
3 impact at residential rates that's being looked at is set \$25 charge so everyone pays to cover
4 distribution costs and asked that it can't go negative for the year.

5 **Mr. Brown** said you could be under one month and it would roll over the next month.

6 **Deputy Town Manager Purvis** said an issue with this is that it has been being done
7 manually, and it can't be automated until more resources come into play for the town to use.

8 **Councilmember Gantt** clarified that Council was wanting to go one decision at a
9 time.

10 **Councilmember Mahaffey** said he was a hard no, as this would position the town as
11 worse than Duke.

12 **Assistant Town Manager Stone** said they wanted to get 90 days' worth of cash on
13 hand in case of unexpected energy costs.

14 **Mayor Gilbert** said it sounds like a lot of numbers and forecasting and asked if this
15 can be looked at and come back at another time to make a more informed decision

16 **Councilmember Zegerman** said he hasn't seen the rate impacts or how it would
17 affect the budget with the rate proposals.

18 **Councilmember Mahaffey** said the 4% increase was a 3% pass-through from the
19 supplier, then 1% from the town, which he said was great.

20 **Mayor Gilbert** said they have a subject matter expert in the room, and he wanted to
21 know if the discussion would be factoring in demand for solar, or if Council wanted to
22 continue going in the direction they felt was right.

23 **Councilmember Mahaffey** said he is listening to the conversation, and he would
24 consider incremental changes to the solar surcharge for non-solar customers. He said he
25 didn't want that charge to get too large for those people, and that wouldn't be fair. He said
26 the town has a chance to learn from Duke and possibly model after them. He said they are
27 moving towards a time of use structure, and he is willing to do that as well over time. He said
28 if the town can change behaviors alongside implementing time of use, it would be a win-win
29 for them and customers.

30 **Director Neumann** said one thing to keep in mind there is really no relationship
31 between the town's rates and how Duke does their business model. He said a lot of this
32 conversation consists of "what does Duke do". He said Duke does things for financial reasons
33 and are driven by a lot of other things that the Town of Apex has nothing to do with. He said
34 we cannot make our policy match Duke's; the town does not have those drivers and is not
35 getting compensated. He said the town can keep rates in line with Duke, but right now the
36 town's rates are 13% cheaper than Duke's residential rates.

DRAFT MINUTES

1 **Councilmember Mahaffey** said he wanted to be clear that he wasn't comparing the
2 town to Duke to say any decision they make would also be good for the town. He said he
3 didn't care what their motivation for doing things was. He said what is important is what our
4 citizens see and the comparison of Duke and the Town's bill amount. He said if the town's bill
5 isn't lower than Duke's, then it shouldn't be a public utility. He said the town have to provide
6 better service at lower cost or roughly the same cost to justify the existence of the electric
7 department in the town. He said there was no reason to do any of that if the town wasn't
8 doing better than Duke for rates and value. He said the town is currently much better than
9 Duke, and he wants to stay much better than Duke in every way.

10 **Mayor Gilbert** said he really loves that the Town of Apex has their own Electric
11 Utilities. He said if things continue going the direction they are going, the town would lose
12 out on that.

13 **Councilmember Mahaffey** said he wouldn't let that happen. He said if it gets to a
14 point where the town is worse than Duke, they could make changes to rectify that.

15 **Councilmember Gantt** said Councilmember Mahaffey's position on the electric
16 utilities discussion has made him skeptical the town should continue with providing the
17 public utility. He said he has become concerned about the long-term direction the town is
18 heading.

19 **Councilmember Mahaffey** said with the current level of solar subsidy of today, he's
20 comfortable with it. He said he would be growing uncomfortable as it grows, and is willing to
21 consider changes. particularly the time of use changes. He would like to keep an eye on what
22 the number is exactly. He said he was trying to communicate that he is willing to change it in
23 the future but today he doesn't think we have a problem but as the adoption grows it can
24 become a problem.

25 **Councilmember Gantt** said the curve looks to be exponential and not linear.

26 **Mayor Gilbert** said when it comes to building the budget, people are suffering. He
27 said he gets a lot of calls of people wondering if there is going to be a tax increase or an
28 electric rate increase, and said all those dollars add up and everyone can't afford it. He said
29 he wants to make some adjustments.

30 **Councilmember Gantt** said he was ready to start voting on some of these proposals.

31 **Councilmember Zegerman** said he felt like the \$25 is meaningless unless the budget
32 impact is known. He asked what is the \$25 minimum dollar bill going to do for the town. He
33 asked what does it help and what would the offset be on a potential rate increase. He said a
34 complete conversation needs to be discussed and not just about whether \$25 is a good
35 number.

36 **Town Manager Crosby** asked Councilmember Zegerman if he wants to understand
37 what is the fixed cost rate per customer to understand how that covers our fixed costs for
38 utility.

DRAFT MINUTES

1 **Councilmember Zegerman** said yes.

2 **Town Manager Crosby** said right now until the new ERP the town cannot separate
3 the charge and the fix rate because our system does the credit to the bill.

4 **Councilmember Mahaffey** said that once the ERP comes into play, the credits that
5 cannot be applied in one month because of the minimum charge could be rolled over to be
6 applied in a different month.

7 **Councilmember Zegerman** said the conversation he would like to have is if the town
8 is looking at a four percent increase on electric grades and if it does a \$25 minimum, how
9 would it be implemented.

10 **Mr. Brown** said the main question for today was if Council was willing to go above the
11 system average for residents based on cost of service. He said case of service is a study which
12 tells how relative the system average to what each class of share of that revenue department
13 is.

14 **Director Grogan** said it was found that the large service was subsidizing residential
15 and the plan is to offset that so the different types of services do a cost recovery. That's some
16 of the rates that were looked at from the Finance Committee and had those large general
17 services frozen because the other increase would make up the revenue rate as it is already
18 overcompensating.

19 **Mr. Brown** said he would cap it as a percentage of the system average.

20 **Director Grogan** asked Councilmember Zegerman what information does he need.

21 **Councilmember Mahaffey** said he wanted to be clear this a different conversation
22 than the one they were just on. He said there has been a concern about residential customers
23 subsidizing other residential commercials. He said he thinks it is good that large commercial
24 customers help subsidize residential customers. He said as long as large customers are
25 getting a better deal than if they were with Duke, and it additionally helps residential
26 customers, he likes that overall. He said he doesn't feel a need for larger customers to have a
27 more equitable distribution. He said he does not want to change the deal that people who
28 bought solar panels already have. He said the capital investment they made assumed there
29 would not be something like the 25-dollar minimum charge being proposed.

30 **Director Grogan** said there are about 24,000 residential customers, but less than 20
31 large customers in this conversation.

32 **Town Manager Crosby** said there is confusion because some information that was
33 presented to the Finance Committee hasn't been presented to the entire field. She said today
34 the biggest thing is the impact on the budget which is something that will have more
35 discussion on May 5th. She said the three main things that need to be addressed are the rates
36 between LGC and residential customers, the 25-dollar minimum electric fee, and the Solar EV
37 subsidies and their impacts.

DRAFT MINUTES

1 **Councilmember Zegerman** said he wants a comparison between current electric
2 funds and what could be brought in or changed based on possible policy levers. Then based
3 on what he understood he said there needs to be a conversation on how the gaps are going
4 to be closed. He said he can't make a call right now on one specific conversation about one
5 specific grade without all the other numbers. He said he didn't have all the information to
6 make an informed decision.

7 **Councilmember Gray** said that's the component of the budget retreat is to talk these
8 discussions out. He said a policy recommendation in terms of how to provide either
9 assistance options like to opt out. He asked Town Manager Crosby to add to the list of
10 discussion topics the feeling that customers with the lowest means have a life raft of sorts for
11 this kind of rate change, and how to manage that through assistance or opt-out options. He
12 said equity is a big part of this conversation, and he wants to ensure that is discussed as well.

13 **Town Manager Crosby** asked Council if they would be amenable to splitting up the
14 conversation.

15 **Councilmember Zegerman** said the conversation of management costs has not been
16 talked about it. He said if it has, he doesn't know about it. He said the conversation has been
17 centered on the revenue side.

18 **Town Manager Crosby** said Finance Committee has.

19 **Councilmember Mahaffey** said the number he thought was a 1% increase in
20 operating costs year over year for electric.

21 **Director Grogan** said it's higher than one percent. She said the town did substantially
22 reduce expenditures and looked at that and inflation, she said specific requests related to
23 new positions or crews were looked at as part of recommendations.

24 **Councilmember Zegerman** said he wasn't part of the Finance Committee and his
25 observation is based on today's conversation. He said it seems he's being asked to make
26 decisions based on partial as incomplete information. He said he cannot do that. He said he
27 needed the full package of information or he would have to be counted out for the vote. He
28 said he can't sit there and say "yeah, this is fine" or "this is not good", since he doesn't
29 understand the complete impact it would have on residents. He said he's frustrated because
30 he's not getting the information needs to make a proper budget decision.

31 **Town Manager Crosby** said that this work session technically is not part of the town's
32 budget process, it's a session that was set to circle back on a conversation regarding rates.
33 She said part of the frustration is probably because this is falling in the middle of the budget
34 process.

35 **Councilmember Zegerman** said that the conversation was being treated as having
36 budget means. He said Director Grogan is asking about specifics in order to model the
37 budget, which he says makes complete sense. He said because of this being tied in, all
38 information needs to be given before making a decision.

DRAFT MINUTES

1 **Director Grogan** said the meeting was just geared to part of the rate study for the
2 impact of solar subsidies and EV charging because the town is seeing a huge uptick. She said
3 a vote is not necessarily needed but she needs direction on these different things. She's also
4 trying to get some direction in terms of budget because of the draft budget and wants
5 Council informed with all information for them to be prepared on May 5th.

6 **Town Manager Crosby** said the challenge is there are two conversations going on,
7 one is a conversation is being followed up from last year and then secondly, she's following
8 up from the Personnel Meeting. She said to Councilmember Zegerman that's why he's
9 missing some information, since not everyone was in on the previous discussions.

10 **Councilmember Zegerman** said they need to develop a viewpoint on how to handle
11 these discussions will have an impact in the future.

12 **Councilmember Mahaffey** said he felt they had, with the discussion around time of
13 use.

14 **Councilmember Zegerman** said yes that is true, but there hasn't been a follow up on
15 everything such as what would happen with the 25-dollar minimum fee.

16 **Mayor Pro Tempore Killingsworth** said it use to be a day and a half of budget
17 retreat where Council would combine all this information into that day and decide based on
18 that policy or budget related item. She said spreading it out like this is better for everybody
19 that we don't have to spend a day and a half analyzing all this stuff all at once. She said it's not
20 about giving feedback, it's about seeing where the policy is and getting the information
21 needed so Council can form a direction to go in. She said the information Councilmember
22 Zegerman is looking for is going to come in the next budget session, and that is based on
23 some of the background information that has been talked about.

24 **Councilmember Zegerman** said he's not part of the Finance Committee or the
25 Personnel Committee so some of the documentation and information being referenced he
26 has not seen, and so he doesn't know what to do with what he is being asked.

27 **Councilmember Gray** said something that had been done before with stormwater is
28 a conversation that was had in committee was determined to be useful to expand to the
29 larger body. He said the issue ultimately needs to be addressed in the budget meeting. He
30 said getting the information earlier helps Council understand things before it's being
31 discussed in a budget meeting.

32 **Councilmember Zegerman** asked if a decision needed to be made or if the
33 conversation could move on for now.

34 **Deputy Town Manager Purvis** said this information will help build out a plan
35 because the systems needed to fully implement these discussions aren't available yet, such as
36 the ERP and the AMI that are expected down the road. He said talking about it now helps
37 plan out for the future. He said the immediate effect is that the town is not changing the rate
38 structure, the rates might change, but the structure will stay the same.

DRAFT MINUTES

1 **Mayor Pro Tempore Killingsworth** said the next time Council talks about solar or any
2 changes that policy and things like the size of the system could also be discussed as possible
3 limitations.

4 **Deputy Town Manager Purvis** said there's a lot of factors that go into this discussion.
5 He to set the future model rate, they need to know what model is going to be used.

6 **Councilmember Zegerman** said now that Council has all these variables in play,
7 scenarios should be run. He said it was a great presentation and that he learned a lot. He said
8 he wanted to understand how far the spread between time of use rates should be in various
9 versions.

10 **[SLIDE 50]**



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13 **[CLOSED SESSION]**

14

15 A **motion** was made by **Mayor Pro Tempore Audra Killingsworth**, seconded by
16 **Councilmember Arno Zegerman**, to go into Closed Session pursuant to:

17

NCGS § 143-318.11 (6)

18 "To consider the qualifications, competence, performance, character, fitness, conditions of
19 appointment, or conditions of initial employment of an individual public officer or employee
20 or prospective public officer or employee; or to hear or investigate a complaint, charge, or
21 grievance by or against an individual public officer or employee."

22

VOTE: 5-0 (UNANIMOUS)

23

24 Council entered into closed session at 5:48 p.m.

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26 Council returned into open session at 6:21 p.m.

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DRAFT MINUTES

1 **[ADJOURNMENT]**

2 Mayor Gilbert declared the meeting adjourned at 6:21 p.m.

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11 Allen Coleman, CMC, NCCCC

12 Apex, Town Clerk

13

14 Submitted for approval by Apex Town Clerk Allen Coleman.

15

16 Minutes approved on _____ of _____, 2023.

Jacques K. Gilbert
Apex, Mayor