

# Virtual Assistant – FAQ's

(Letter of Residency, Non-Pay Payment Flow, Tree Trimming)

Moderated Usability Testing

# Background and Methodology

# Overview

## Methodology

A total of **10 moderated usability tests** were conducted using the UserTesting panel. Respondents were required to be a customer of Southern Company (smartphone/desktop users aged 28-65). All contributors were responsible for paying their electric power bill.

The tests were conducted remotely via UserTesting.com and lasted on average about **38 minutes**

## Goal

The goal of each session was to gather feedback on the ease or difficulty of completing tasks centered on making (3) specific inquiries via the virtual assistant.

## Strategy

The test used a combination of **tasks**, and **verbal questions**, throughout the session and probed for clarification and more details, as needed.

## Scenarios

**#1 Letter of Residency** - You've recently moved into a new home, and are having to share a Letter of Residency with your county's schooling system as proof of your inhabitation. You are informed that your power company would be able to provide you with this document. Use the Virtual Assistant to find more information on how to get access to this document.

**#2 Non-pay Payment Flow** - You forgot to pay your last month's bill and now your power has been shut off. You want to pay your bill and have your power turned back on. In this task, engage with the chatbot to resolve this issue.

**#3 Tree Trimming** - You're concerned about safety due to overgrown trees near a main power line in your neighborhood. Engage with the chatbot to ascertain information regarding your power company's tree trimming procedures.

# Participant Demographics

Participants aligned with the following demographics:

- **Sample size:** 10
- **Age Range:** 28 - 65
- **Gender:** Any
- **Device:** Mobile/Desktop
- **Status:** 5 Logged in + 5 Logged out
- **Household income:** Any
- **Rate Plan:** Any
- **Other qualifications:**
  - Southern Company customer(Georgia Power, Alabama Power)
  - Responsible for paying the electricity bill at my residence and/or my business

# User Contexts

Before launching users into our three tasked tests we asked users we asked a series of preliminary questions to gauge users history and impressions with customer service chatbots.

Users most commonly cited utilizing Chatbots to:

- Connect with a real life agent
- Navigational support
- General inquiries relating to account details

Users Expectations for AI Chatbot's Capabilities:

- Basic Inquiries vs Complex Inquiries
  - **4 users** mentioned a preference for utilizing chatbots to handle primarily for non-complex issues, based from past experience with basic inquiries having more success
- Unique text input requirements
  - Several users understood large unique text input as a requirement in chatbot engagement and shared frustration surrounding past chatbot's comprehension capabilities,  
*"I'm not much of a typer, so I usually call because I don't want to have to type all that" – BraveDave*  
*"Compared to humans, with chatbots I may have to ask the same question in two or three different ways to get the answers I'm looking for" - PuckGA*

# User Contexts

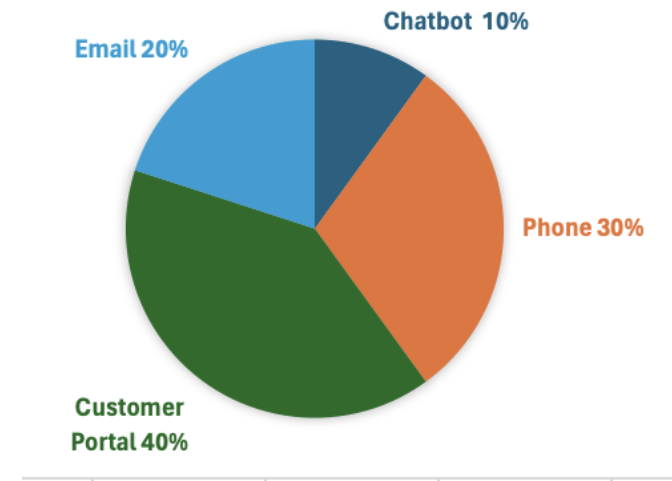
## Uncovering Users' Natural Inquiry Channel

As part of our preliminary questioning users were presented with all 3 test scenarios and asked to identify the communication channel they would be most likely to utilize to find resolution to each of the respective issues presented.

**In Scenario 1:** Users were asked which communication channel they would first utilize to gain access to a Letter of Residency

- **4 out of 10** users stated browsing the **Customer Support Portal (OCC)**
- **3 out of 10** users stated they would call a **Phone Agent**
- **2 out of 10** users stated they would be most likely to initially reach out via **Email**
- **1 out of 10** of users stated they would first reach out via the **Virtual Assistant**

**SCENARIO 1**



# User Contexts

## Uncovering Users' Natural Inquiry Channel

**In Scenario 2:** Users were asked which communication channel they would first utilize to address their power being cut due to a missed payment

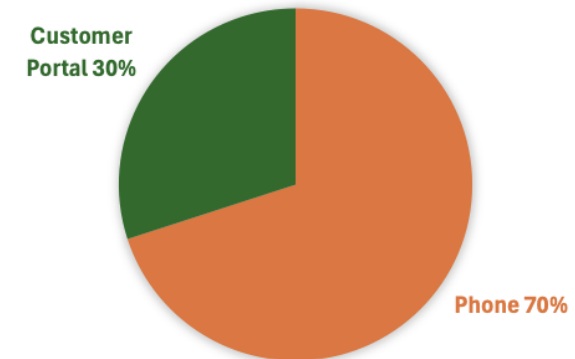
- **7/10** of users stated they would call a **Phone Agent**
- **3/10** users stated browsing the **Customer Support Portal (OCC)**
- **0/10** users stated they would be most likely to initially reach out via **email**
- **0/10** users stated they would first reach out via the **Virtual Assistant**

*"I know how to submit a payment online, so normally I would probably just do that, but here I'd probably need to know when exactly my power's getting turned back on, so I'd probably call to get that info" – uzed01*

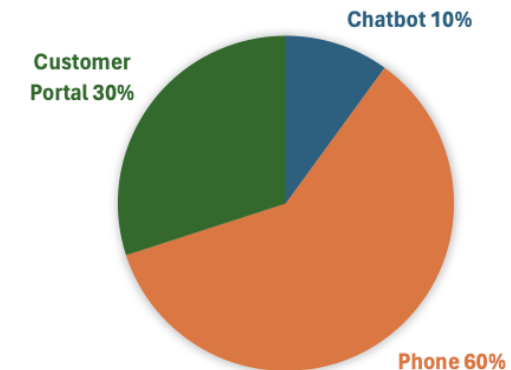
**In Scenario 3:** Users were asked which communication channel they would first utilize to ascertain information regarding their power company's tree trimming procedures.

- **6/10** users stated browsing the **Customer Support Portal (OCC)**
- **3/10** users stated they would call a **Phone Agent**
- **1/10** users stated they would first reach out via the **Virtual Assistant**
- **0/10** users stated they would be most likely to initially reach out via **email**

**SCENARIO 2**



**SCENARIO 3**

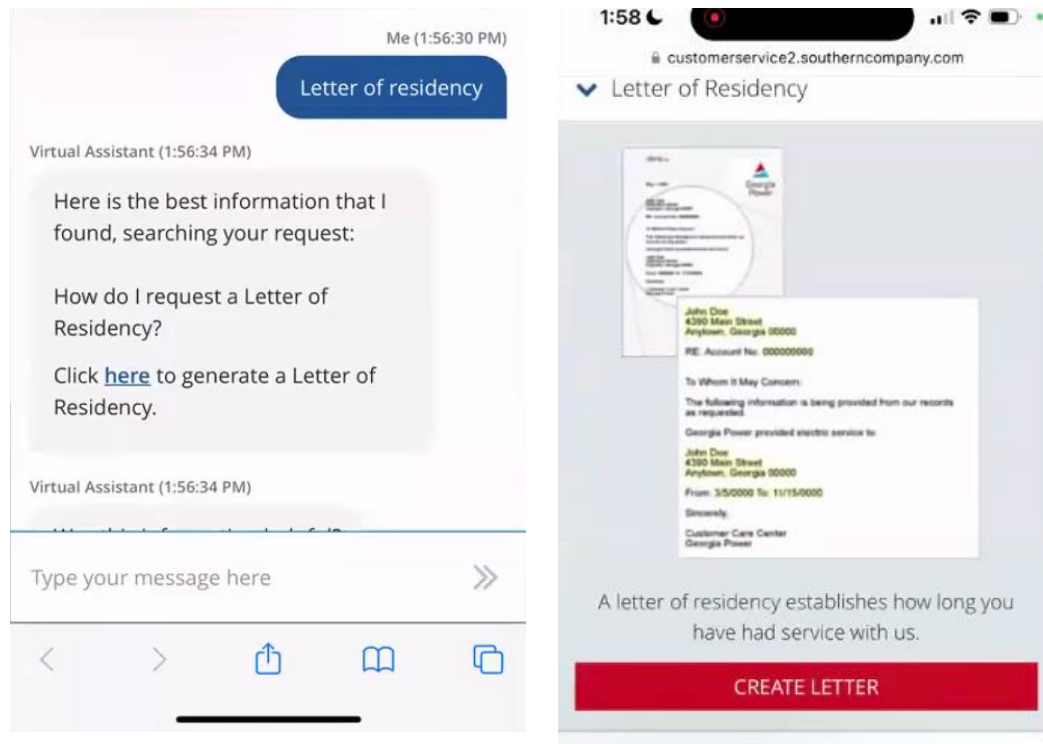


Insights



## Scenario 1: Obtain Letter of Residency information

**Letter of Residency** - You've recently moved into a new home and are having to share a Letter of Residency with your county's schooling system as proof of your inhabitation. You are informed that your power company would be able to provide you with this document. Use the Virtual Assistant to find more information on how to get access to this document



The participants showed varying degree of familiarity with LoR. **7/10** of participants were familiar with LoR.

**10/10** participants successfully made it to the Letters and Forms page where they can generate the Letter of Residency.

**10/10** participants typed in their query, mostly using keywords ("Letter of Residency"), instead of utilizing the provided chips.

**8/10** of participants expected the link to lead them to a page for letter generation. While **2 of the 5 logged out** participants expected a log-in prompt or an intermediary authentication step.

**10/10** participants found the VA efficient and straightforward for this task, with a few saying they were positively surprised.

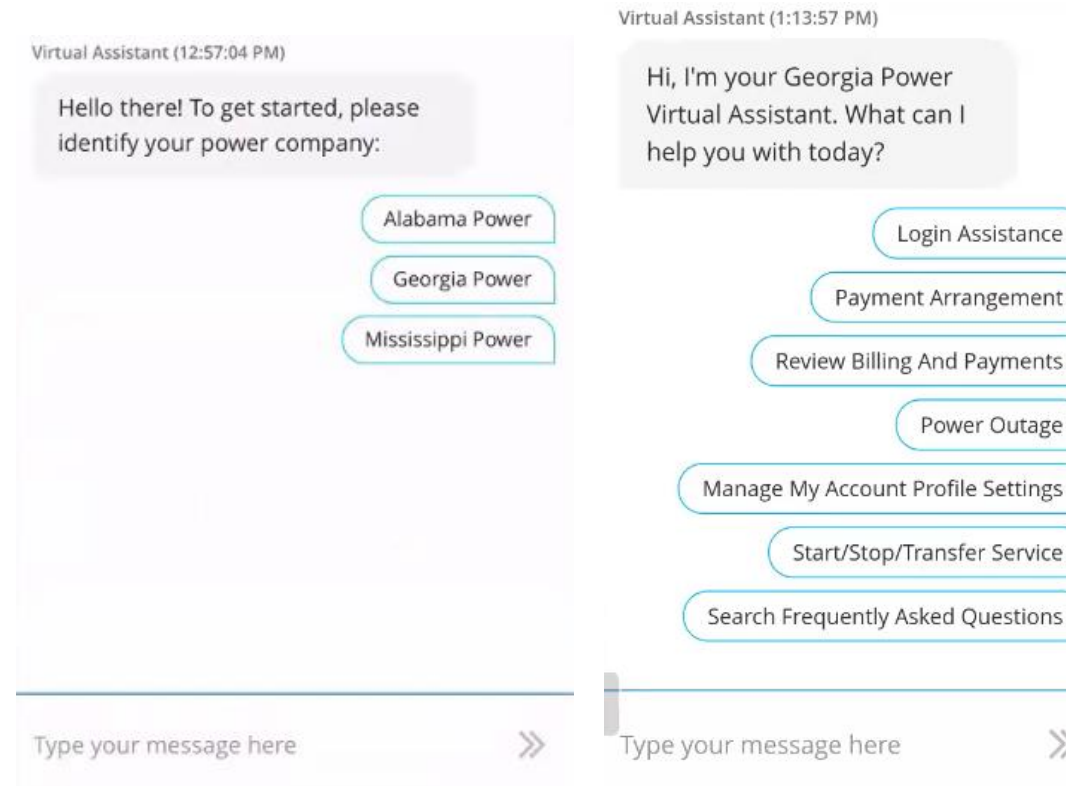
## Scenario 2: Power cutoff due to Non-Payment

**Non-pay Payment Flow** - You forgot to pay your last month's bill and now your power has been shut off. You want to pay your bill and have your power turned back on. In this task, engage with the chatbot to resolve this issue.

**6/10** participants successfully made it to the [Pay Now](#) flow.

Of those 6 participants, there were **3 different paths** **that** successfully led them to the Pay Now flow.

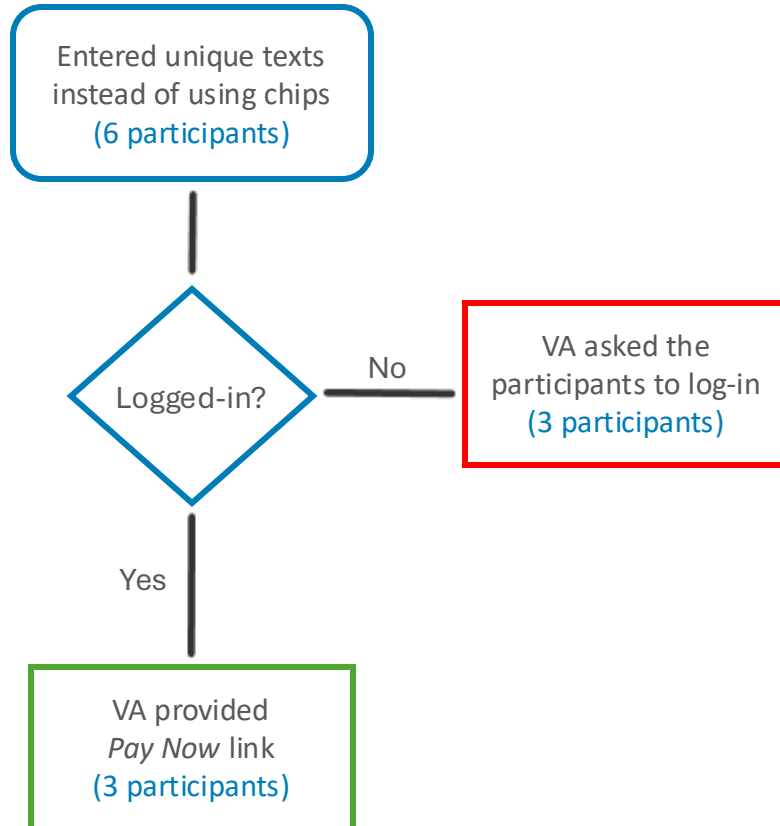
- Typed-in prompts using the chat box
- Review Billing and Payment chip
- Payment Arrangement chip



*Logged-out (left) vs logged-in (right) initial greetings and chips.*

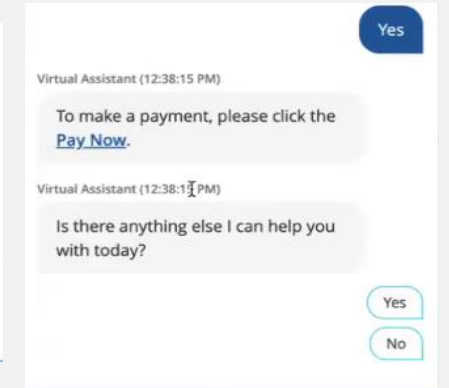
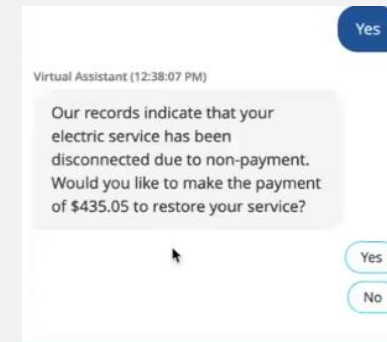
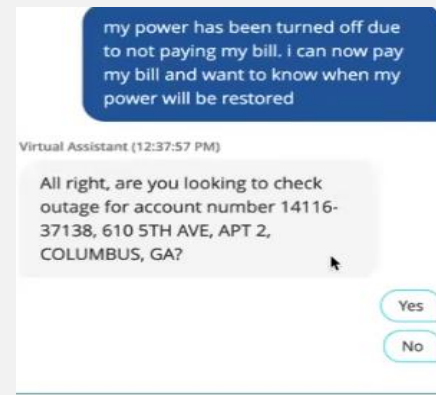
## Scenario 2: Power cutoff due to Non-Payment (Cont.)

### Unique text path

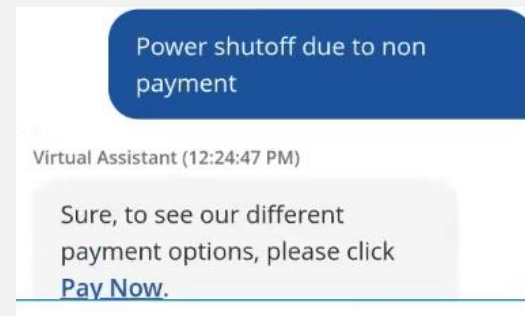


The Virtual Assistant showed different responses/behavior for each participant who completed this task using unique texts.

#### Logged-in 1.)



#### Logged-in 2.)



#### Logged-out 1.)



## Scenario 2: Power cutoff due to Non-Payment (Cont.)

### Review Billing and Payment Chip path

Of the 10 total participants, only **1 (logged-in)** took the Review Billing and Payment chip path, and the (successful) outcome was as follows:

The sequence of screenshots shows the following chat flow:

- Screenshot 1:** A menu titled "Review Billing And Payments" with options: "Review My Energy Usage", "Energy-Saving Tips", "Get My Billing Information", "Compare My Bills", "Review My Payment Options", "Make A Payment", and "Enroll In Paperless Billing".
- Screenshot 2:** Cynthia Moore (1:53:14 PM) selects "Get My Billing Information". The Virtual Assistant (1:53:15 PM) asks: "Are you looking for billing details for account number 00136-92227, 1225 APPLING CT, APT B, MACON, GA?". Cynthia Moore (1:53:21 PM) responds "Yes".
- Screenshot 3:** The Virtual Assistant (1:53:24 PM) informs: "Our records indicate that your electric service has been disconnected due to non-payment. Would you like to make the payment of \$699.29 to restore your service?". Cynthia Moore (1:53:21 PM) responds "Yes".
- Screenshot 4:** The Virtual Assistant (1:53:50 PM) says: "To make a payment, please click the [Pay Now](#)." Cynthia Moore (1:53:49 PM) responds "Yes". The Virtual Assistant (1:53:50 PM) then asks: "Is there anything else I can help you with today?". Cynthia Moore (1:53:50 PM) responds "No".

## Scenario 2: Power cutoff due to Non-Payment (Cont.)

### Payment Arrangement Chip path

Of the **10** participants, **5** of them clicked the Payment Arrangement chip as their *first* course of action for this task.

However, of those **5**, only **1 (logged in)** successfully made it to the Pay Now flow.

Payment Arrangement

Virtual Assistant (3:20:16 PM)

All right, are you looking to make a payment arrangement for account number 00136-92227, 1225 APPLING CT, APT B, MACON, GA?

Yes

No

Yes

Virtual Assistant (3:20:26 PM)

Our records indicate that your electric service has been disconnected due to non-payment. Would you like to make the payment of \$699.29 to restore your service?

Yes

No

Yes

Virtual Assistant (3:20:42 PM)

To make a payment, please click the [Pay Now](#).

Virtual Assistant (3:20:42 PM)

Is there anything else I can help you with today?

Yes

No

Success flow

Payment Arrangement

Virtual Assistant (3:18:54 PM)

To better help with your request, please log in and retype your question in the chat.

i

Connection closed, chat has ended.

i

Please help us improve the chat experience by taking a quick survey. [Begin Survey](#)

The other 4 (logged-out) participants received this response

## Scenario 2: Power cutoff due to Non-Payment (Cont.)

### Insights: Overall Experience

Participants had varied expectations regarding the *Virtual Assistant's* capabilities, from anticipating **guidance on bill payment and power restoration** to having doubt in the VA's ability to take action due to past experiences with other chatbots

However, users **consistently desired** information on the **timeframe for power restoration and specific guidance on the reconnection process**, emphasizing a need for clarity on next steps after payment.

### Insights: Logged-Out vs Logged-In

- ☐ Participants in the logged-out group generally expressed *lower expectations* of the *Virtual Assistant's* capabilities.
- ☐ **3/5** logged-out participants experienced Virtual Assistant ending interaction without resolution.
- ☐ The Virtual Assistant was *more successful in guiding the logged-in participants up to the Pay Now page*.
- ☐ Logged-in participants stated they were *more likely* to consider using the Virtual Assistant again in the future for similar inquiries.


"This [Pay Now] screen is helpful, in terms of actions, but I would love some information on what would happen after this pertaining to my power being turned on." — test\_user41

"The chatbot wasn't much help, on the actual website [OCC Overview page] the message is kind of helpful that it's just saying what needs to be paid to reconnect service but there's nothing saying about how I'll actually reconnect the service after making the payment, considering this is an urgent situation." — doglover1994

### Pay NOW

Setup

Step 1/3

 Your electric service has been disconnected due to non-payment. You must pay a minimum of \$699.29 to reconnect service. A reconnect fee will be charged and a deposit may be required. Need assistance? We can help. [Learn more about Payment Assistance](#)

Account	00136-92227
	Test
	1225 APPLING CT
Due Date	05/03/24
Total Due ⓘ	\$885.39



## Scenario 2: Power cutoff due to Non-Payment (Cont.)

### Insights: Chips Summary

When asked about their opinion on the chip options and why they did or didn't use them, majority of the participants stated that *Payment Arrangements*, *Review Billing and Payments*, and *Power Outage* were the ones they considered for this task.

#### **Payment Arrangements:**

Participants generally found this chip potentially relevant, but expressed uncertainty because it seemed most users were already familiar with Payment Arrangements program.

#### **Review Billing and Payments:**

Participants viewed this chip as more about past transactions than current issues

#### **Power Outage:**

Those who considered this chip hesitated because of their prior knowledge that 'Power Outage' in this context is an entirely different issue. *Zero* participant clicked on Power Outage.

### Insights: Unique Texts

“My power has been turned off due to not paying my bill. I can now pay my bill and want to know when my power will be restored.”

**“Power shut off due to non-pay”**

**“Make a payment”**

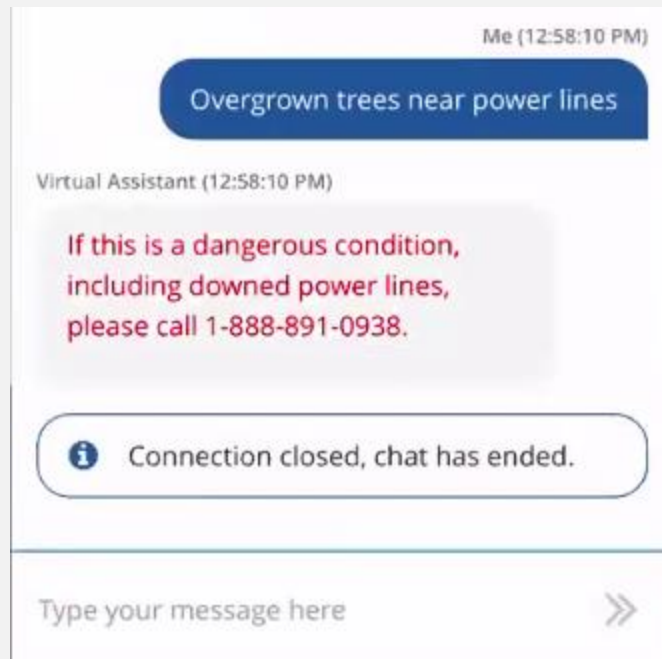
“How can I restore my service, I was late on a payment and need to restore my service”

**“My power has been shut off because I missed a payment, how can I resolve this issue?”**

## Scenario 3: Tree Trimming

The participants were tasked to engage with the Virtual Assistant to resolve an issue regarding overgrown trees near a main powerline in their neighborhood.

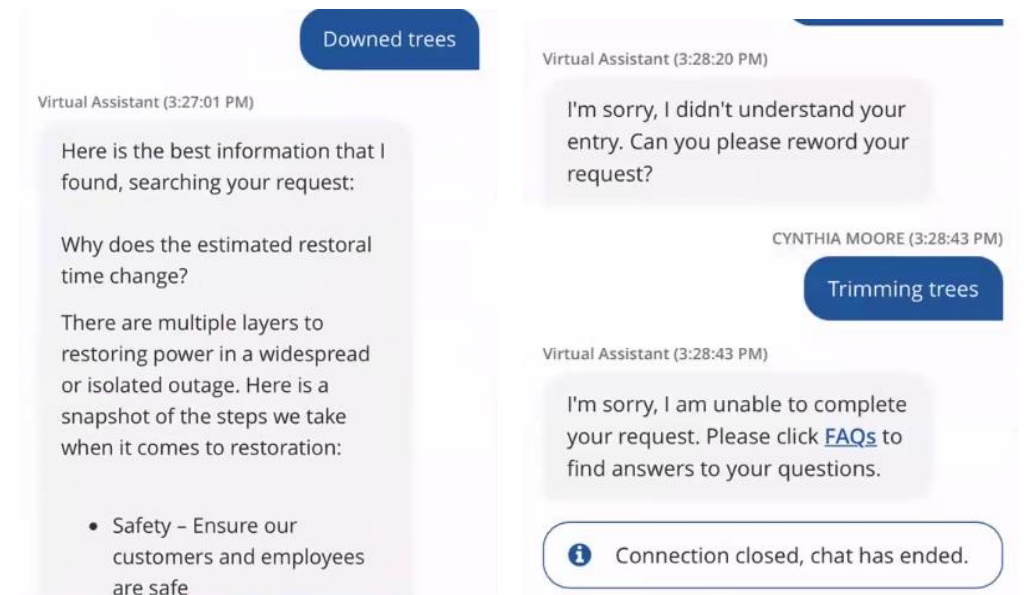
**10/10** participants opted *type in* their query as opposed to using the provided chips.



*9/10 participants received the response above*

Of the 9 participants who received the red text response regarding downed power lines with a hotline to call, **2** of them had to attempt multiple typed queries to reach this response.

The **1** participant who didn't receive the red text response made *four attempts* ("downed trees," "overgrown trees," "main power lines," and "trim trees") before the Virtual Assistant ultimately gave her a link to the FAQ's before ending the chat.





## Scenario 3: Tree Trimming (Cont.)

### Insights

The participants had varied expectations regarding the Virtual Assistant's capabilities, with some seeking *direct assistance* and others **expecting referrals to relevant departments or professionals**.

Users appreciated the phone number provided, but desired **guidance on addressing non-urgent concerns** or accessing relevant *resources beyond emergency situations*.

**3/10** said they are *more* likely to use the Virtual Assistant in the future for issues like this, while **7/10** said they are *less* likely to use it.

Satisfaction with the Virtual Assistant's engagement varied among participants. While some found the interactions helpful, most users expressed dissatisfaction **with the abrupt closure of chats or the lack of follow-up options**.

*"...at least I got a phone number here—I can use that and take the next steps myself. Since **the issue is overgrown trees and not downed power lines**, I guess I can lump it into possible dangerous condition, so I can justify it [the answer]." — uzed01*

*"I was expecting a little bit more, like **it should ask me questions like how far are the lines or where do you want to trim your tree**, something like that, but I think it makes sense since it could be a dangerous thing so it's better to call." — Msm40*

**"Overgrown trees near power line"**

**"Overgrown trees" "tree trimming"**

*"there are overgrown trees near the main power line in my neighborhood. I am concerned about the trees falling on the power line."* **"Overgrown trees"**

**"tree trimming" "tree near power line."**

**"Danger" "Hazard"**

**"Tree touches powerline"**

# Users' Reflections

Following the completion of each task users were asked to reflect on their experience utilizing the chatbot. The primary goal of these last inquiries was to measure the impact (if any) their engagement in this test might have had on their impression of the chatbots and it's perceived capabilities

Following each test users were asked if they would be more or less likely to utilize the chatbot after interacting with it, if they were faced with a similar scenario in the future

- In **Scenario 1: Letter of Residency -- 6 out of 10** users mentioned that they would be **more** likely to consider utilizing the chatbot in a similar scenario
- In **Scenario 2: Cut for Non-Payment -- 7 out of 10** users mentioned they would be **less** or 'no more likely' to consider utilizing the chatbot in a similar scenario
  - **1 user** mentioned noticing the red banner present following their log in, and identified that as their most likely first channel of action in any similar scenarios  
*"The chatbot wasn't much help, on the actual website [OCC Overview page] the message is kind of helpful that it's just saying what needs to be paid to reconnect service" – Doglover1994*
- In **Scenario 3: Overgrown Trees -- 3 out of 10** users mentioned they would be **more** likely to consider utilizing the chatbot in a similar scenario  
*"It was a little frustrating with being unsure with what words to input to get the right response" - PuckGA*

## Pay NOW

Setup

Step 1/3

**⚠** Your electric service has been disconnected due to non-payment. You must pay a minimum of \$699.29 to reconnect service. A reconnect fee will be charged and a deposit may be required. Need assistance? We can help. [Learn more about Payment Assistance](#)

Account	00136-92227
	Test
	1225 APPLING CT
Due Date	05/03/24
Total Due ⓘ	\$885.39

# User's Reflections (Continued)

**User Suggested Improvements:** Users were also asked to share any suggested improvements they might have to make the chatbot more user friendly

- **Chat Completion Suggestion:** Users expressed confusion in the chatbot's unexpected closing out of a chat dialogue by the chatbot, a common suggested improvement mentioned was to make the chat completion process less abrupt and provide opportunities for users to seek further assistance or clarification
- **Automated Response Chips:** Users often expressed frustration with not being able to find solution paths for these specific scenarios in the automated response, the most common improvement mentioned was for more precise automated response options.
  - In Scenario 2 users often didn't consider "Review Billing & Payments" as a viable route, predicting it would be mainly archival information, users mentioned not expecting it to be a path they could use take action like "Make a Payment"

