



Path to Commercialization RTP® Bill Pay

Version 3.0

January 2021

Change Log Changes from Version 2.0 to Version 3.0

Page No.	Change in Content	Comments		
3	Created an executive summary			
6	Updated the pre requisites based on recent discussions with participants			
7-10	Made updates to the RTDDA bill pay launch requirements to reflect inputs from recent discussions with FIs and billers			
13-58	Made updates to the list of scenarios, process flows and sample prototype screens to reflect inputs from recent discussions with FIs			
59-60	Created a section to describe a recommended phased approach to commercialization for RTP Bill Pay			





Executive Summary

RTP® Bill Pay commercialization approach has been developed to help all early adopters be successful in their RTP Bill Pay launch and commercialization journey

RTP Path to Commercialization-

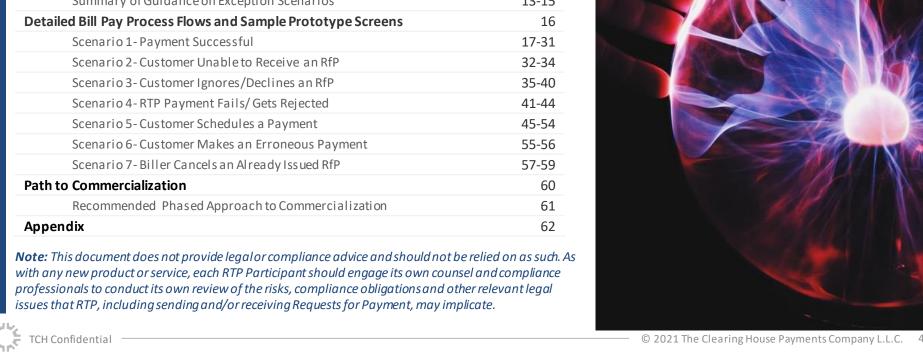
- TCH has defined a set of prerequisites that all stakeholders within the RTP value chain Biller, Biller's FI, Customer's FI, and the Customer may consider in order to successfully launch and enable the use RTP® Bill Pay services
- With the help of several working group discussions over the last two years with participating FIs, TCH has outlined a list of high level bill pay launch requirements across different stages of the bill pay journey (RfP initiation, Approving Payment Instructions, FI / Biller Payment Posting, Payment Acknowledgment, Returns), which are expected to aid early adopter FIs provide their customers with a consistent RTP Bill Pay product experience
 - ☐ In addition, each participant must adhere to the RTP Operating Rules when sending payments or messages through the RTP network
- To support the FIs through their Bill Pay journey, 7 scenarios (both positive and exception scenarios) have been outlined to provide guidance to participants, and ensure that they're adequately prepared to enable RTP® for their customers/biller clients
- The recommended approach for FIs is to follow a phased path to ensure a successful foundational launch and commercialization
 - □ Phase 0 (Bank-to-Bank Testing and Prod Validation) Test the basic end to end flow with a few transactions and limited end customers
 - Phase 1 (Small Scale Production Launch) Test the RTP® RfP capability (including positive and exception scenarios) with a small end customer cohort
 - □ Phase 2 (Commercialization) Launch the RTP® RfP capability to all retail banking customers that can receive RfPs from participating billers

This module lays out the approach, requirements, and scenario guidelines that FIs may leverage to best prepare for their RTP® product launch and commercialization



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Bill Pay Prerequisites Across Roles



Biller

- The biller has identified the preferred customer cohort and enrolled them for RfPs
- Biller has the necessary infrastructure to be able to send RfPs to end customers via their FI, and accept payments via RTP®
- The biller has acquired bank account details of the customer to initiate an RfP
- For privacy purposes, the biller may consider providing a disclaimer (when a customer signs up for RTP® as a payment method with the biller) that the bill will be delivered and available to all persons who have access to the bank account (For e.g., all joint account holders)



Biller's FI

- ✓ Biller's FI follows appropriate processes to enable RfP functionality for billers (conducting due diligence, updating legal terms, complying with RTP® rules etc.)
- The biller's FI is enabled to send RfP and track RfP requests
- The biller's FI has the capability to receive credit transfers using the RTP® network
- The biller's FI has individually determined the pricing and other T&Cs for its biller customer
- Biller's FI must implement documented procedures to perform risk based due diligence on a biller that seeks to initiate RfPs, monitor RfPs submitted by a biller and investigate any report of fraudulent RfP and retain the right to suspend biller's ability to initiate RfPs



Customer's FI

- Customer's Fl is enabled to receive and respond to RfP requests
- Customer's FI has the capability to make credit transfers via RTP® network
- Customer's FI must authenticate the customer in accordance with the RTP® rules
- Customer's FI has a digital interface enabling the customer to view and respond to an RfP
- Customer's FI must utilize fraud and risk-screening measures prior to submitting a Payment Message to the RTP® System
- Customer's FI has updated its T&Cs / disclaimers for its customers to use RTP®



Customer

- Customer has provided necessary credentials (RT and DDA number) to the biller to send an RfP
- The customer FI account is digitally enabled
- The customer has not opted out of receiving RfPs from the biller/all billers

RTDDA Bill Pay Launch Requirements (1/4)

	2, (2) (a) Laarieri (10) (2, 1)			Development Effort			
Step	Reqmt. No.	Requirement Description	Cust. Fl	Biller Fl	Biller		
	1.	Ability to verify if the biller meets the FI's RfP eligibility criteria, including with respect to the RTP Rules and Requirements for Request for Payment Customers	NA	Υ	NA		
	2.	Ability to provide the biller with an $interface$ [batch or API $-$ FI's discretion] to enter payment details to initiate an RfP	NA	Υ	NA		
	3.	Ability of the biller's FI to validate the eligibility of the customer's FI to receive RfPs [e.g., valid routing no., RfP receive enabled, and currently active on the network]	NA	Υ	NA		
	4.	Ability of biller's FI to communicate to the biller if customer's FI is not RTP® enabled along with the appropriate reason code	NA	Υ	Υ		
Initiate RfP	5.	Ability of the customer's FI to communicate back to the biller's FI if an RfP cannot be accepted and/or presented to the customer, along with a ppropriate reason code	Υ	NA	NA		
	6.	Ability of the biller's FI to communicate back to the Biller if a customer is unable to receive an RfP along with appropriate reason code	NA	Υ	Υ		
	7.	Ability of the biller to maintain a record in customer's bill pay preferences in case an RfP cannot be delivered [as indicated by the biller's FI]	NA	NA	Υ		
	8.	Ability of the customer's FI to authenticate the customer as per RTP® operating rules on enabled digital channels [as incurrent state]	Υ	NA	NA		
	9.	Ability of the customer's FI to validate customer's details and receive an RfP [e.g., valid bank account no., has not opted out, is digitally enabled]	Υ	NA	NA		

Note: To access the latest version of the operating rules, please refer to the following link: <u>RTP Operating Rules, TCH</u>

RTDDA Bill Pay Launch Requirements (2/4)

				Development E	
Step	Reqmt. Requirement Description No.		Cust. Fl	Biller Fl	Biller
	10.	Ability to notify a customer that an RfP has been received [email/push notification/etc.]	Υ	NA	NA
	11.	Ability for a customer to opt out of receiving RfPs from a particular biller [FI's discretion to provide opt out at customer level or at an account level]	Υ	NA	NA
	12.	Provide customer the option to access an RfP through a digital interface supported by his/her FI [appor browser – FI's discretion]	Υ	NA	NA
	13.	Ability to display all necessary fields like amount due, due date, biller name, customer name, customer's account no. [masked if needed] once the RfP is opened	Υ	NA	NA
	14.	Ability to provide a link to view the detailed bill statement [TCH Document Services]	Υ	NA	Υ
	15.	Allow billers to indicate when a full payment is required vs. when a variable amount is allowed [max, min, without cap etc.]	NA	Υ	NA
Initiate RfP	16.	Ability of the biller's FI to send RfP status messages to billers in their preferred format and time – daily/ real time/any other frequency based on existing banking relationship	NA	Υ	NA
	17.	Ability of the customer's FI to send a reminder closer to due date and / or when an existing RfP is overdue [Channel of notification and frequency will be based on customer preferences]	Υ	NA	NA
	18.	In case of a joint customer bank account , customer's FI should implement appropriate practices and legal terms to govern presentation of RfPs [At FI's discretion based on their internal customer enrollment process. For e.g., If one RfP is paid by one account holder, the RfP may appear 'paid' to both account holders]	Υ	Υ	Υ
	19.	Ability to keep an RfP open till the expiration date set by the biller [RTP 2.9 specs allow the biller to set an expiration date in an RfP]	Υ	NA	NA
	20.	Allow billers to cancel an existing RfP	NA	Υ	NA
	21.	Ability to display a cancelled RfP in 'read only' mode	Υ	NA	NA

Note: To access the latest version of the operating rules, please refer to the following link: RTP Operating Rules, TCH

N = No additional dev may be needed; Y = additional dev may be needed; NA = Not applicable

Davidonment Effort

RTDDA Bill Pay Launch Requirements (3/4)

	(2, 1,			Development Ej		
Step	Reqmt. No.	Requirement Description	Cust. Fl	Biller Fl	Biller	
	22.	Ability of the customer's FI to display available and accessible account balance to the customer [for 'pay now' feature—up to FI's discretion to show the balance before initiating the payment transaction and / or after the payment]	Υ	NA	NA	
	23.	Ability for a customer to ignore an RfP	Υ	NA	NA	
	24.	Ability for a customer to reject / decline an RfP	Υ	NA	NA	
Approve Payment Instructions	25.	Ability for the customer to set exact date and time of the payment [fullor partial] for an RfP to help them with their financial planning	Υ	NA	NA	
mistr decions	26.	Ability to send information regarding scheduled payments to the biller's FI	Υ	NA	NA	
	27.	Ability to send information regarding scheduled payments to the biller	NA	Υ	NA	
	28.	Ability for the customer to select appropriate payment method (credit, checking account etc.) to make a payment to an RfP. The DDA account number should only serve as an ID to route the RfP to the appropriate customer, and not as the sole method to make a payment	Υ	NA	NA	
Payment	29.	Ability to make the funds immediately available to the biller's account [in real time per SLA]	NA	Υ	NA	
Posting	30.	Ability to immediately post a payment received to customer's service account by the biller**	NA	NA	Υ	

Note: To access the latest version of the operating rules, please refer to the following link: RTP Operating Rules, TCH

N = No additional dev may be needed; Y = additional dev may be needed; NA = Not applicable

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RTDDA Bill Pay Launch Requirements (4/4)

					,
Step	Reqmt. No.	Requirement Description	Cust. Fl	Biller Fl	Biller
	31.	Ability of the biller to send payment acknowledgement directly to the customer in real time*	NA	NA	Υ
Payment Acknowledge	32.	Ability to show payment sent message [visually in the customer's banking digital interface] as soon as the payment is made (based on bank-to-bank acknowledgement message)	Υ	NA	NA
ment	33.	Ability to show payment acknowledgement notification [visually in the customer's banking digital interface] as soon as the payment is updated by the biller* on the customer service account	Υ	NA	NA
	34.	Ability for a customer to send a Request for Return of Funds through the customer bank	Υ	NA	NA
	35.	Ability of the biller to receive Request of Return of Funds through the biller bank	NA	Υ	Υ
Request for Return of Funds	36.	Ability of the biller to send acceptance/rejection for the Request for Return of Funds [based on biller's internal refund policies and requirements]	NA	Υ	Υ
	37.	Ability of the biller to initiate a credit transfer in response to the Request for Return of Funds in real time (in case it is accepted)	Υ	Υ	Υ

Note: To access the latest version of the operating rules, please refer to the following link: <u>RTP Operating Rules, TCH</u>

Development Effort

Summary of Bill Pay Process Guidelines



Bill Pay Process Flows

Positive Scenario	Exception Scenarios					
1	2	3	4	5	6	7
Payment Successful		Customer Ignores / Declines an RfP	RTP Payment Fails / Gets Rejected	Customer Schedules a Payment	Customer Makes an Erroneous Payment	Biller Cancels an Already Issued RfP
		X				×



Summary – Guidance on Scenarios (1/3)

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Scenario	Description	Guidance for FIs
1. Payment Successful	After customer requests the biller for an RfP, he/s he receives the RfP via his/her digital banking interface and makes a successful payment for that RfP	■ FI may process the RTP payment (BAU)
2. Customer Unable to Receive RfP	 A customer may not be a ble to receive RfPs due to several reasons. For example: Customer's FI is not enabled to receive RfPs or send RTP payments Customer may have opted out from receiving RfPs from a II billers, or RfPs from a particular biller Customer is not digitally enabled with his/her FI 	 The customer may not be a ble to use RTP as a payment method to make bill payments, until their FI is RTP payment enabled If the customer has opted out from receiving RfPs from a particular biller, the customer FI may consider gui ding them to update preferences to start receiving RfPs from that biller If the customer is not digitally enabled, the FI may consider advising on next steps to enable customer digital enablement, and set up preferences
3. Customer Ignores / Declines an RfP	 A customer mayignore/decline an RfP for any reason, including: Customer has made a payment in full through another channel Customer does not recognize the biller The requested amount is different from the invoice amount, or the customer has paid partially through another channel 	 If the customer has made a payment in full through another channel and ignores the RfP received, the RfP will expire provided no action is taken by the customer before the expiry date set by the biller If a customer ignores an RfP because they cannot recognize the biller, the FI should check whether the customer has requested to receive RfPs from that biller If a customer has paid partially or if the requested a mount is different from the invoice a mount, biller may cancel the already issued RfP and send a new / reissued RfP based on updated invoice details



Summary – Guidance on Scenarios (2/3)

January January		
Scenario	Description	Guidance for FIs
4. RTP Payment Fails / Gets Rejected	A customer's RTP payment may fail / get rejected due to the following reasons - a) Technical problem at the customer's FI/Sending Participant or the biller's FI/Receiving Participant (e.g., FI not live on the RTP network when the payment is initiated) b) Specific conditions set up by the biller for the RfP sent (e.g. biller doesn't accept payments for an amount that exceeds the amount due)	 If the payment cannot be made due to an FI's technical issue, the FIs may try processing the payment again based on their retry process, along with sending the appropriate customer communication If the payment still fails, customer may be advised to try again later If the payment fails due to specific conditions set up by the biller, customer FI may communicate the rejection reason and advise the customer on next steps
5. Customer Schedules a Payment	A customer may choose to schedule a payment if he/she does not want to pay it immediately, providing him / her with better control and flexibility. Once the payment is scheduled, a credit transfer is made to the biller as per the date selected by the customer	 FI may process the RTP payment (BAU) on the scheduled date
6. Customer Makes an Erroneous Payment	Customers may make an erroneous payment in cases such as — Customer accidently adding a zero and paying more than was requested by the biller in the RfP Duplicate payment made (one through the RfP received, and another through a different payment channel) In such cases, the customer may seek a refund for the payment made in error	 FI may use the Request for Return of Funds process to request the Receiving FI to return the payment made in error (Consumers may have rights under Regulation E for errors caused by the Sending FIs) FI may also advise customers to reach out to the biller for refunds, which may be handled by billers based on existing business processes and policies. Billers should inform the customer about the refund status based on existing standard operating procedures

Summary – Guidance on Scenarios (3/3)

Scenario	Description	Guidance for Fls
7. Cancels an Already Issued RfP	A biller may cancel an existing RfP under the following scenarios — Customer received an RfP with incorrect bill details (e.g., amount, date, etc.) Customer has already paid the bill partially through another channel. In this case, the biller may cancel the existing RfP, and reissue a nother RfP with the updated bill amount due	If an already issued RfP is cancelled by the biller, the customer may view the cancelled RfP but may not be able to respond to it with an RTP payment (the customer may make a payment based on next steps communicated by the biller)



Detailed Bill Pay Process Flows and Sample Prototype Screens



1. Payment Successful – Setting the Stage

Customer Receives an RfP and Makes a Successful Payment



Context

After customer requests the biller for an RfP, he/she receives an RfP via his/her digital banking interface and makes a successful payment for that RfP



Prototype Link

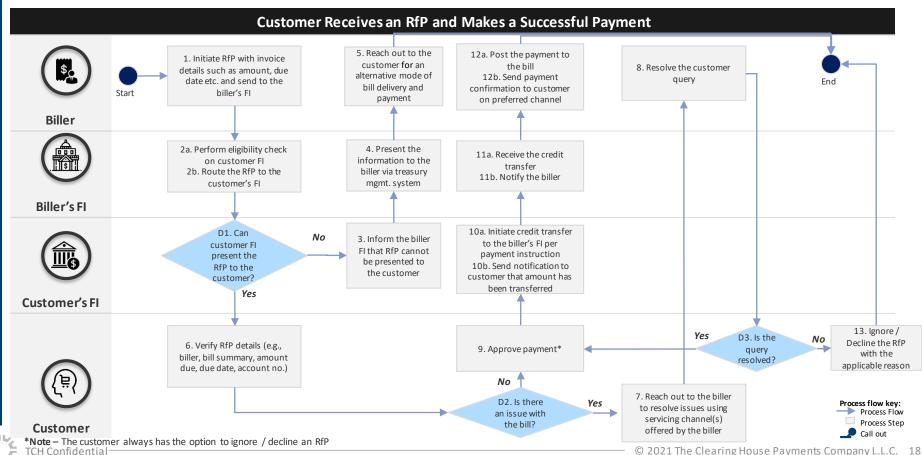
<u>Customer Receives an RfP and Makes a Successful Payment</u> (Full Amount)

Payment Successful (Partial / Modified Amount)

Payment Successful (Minimum Amount)

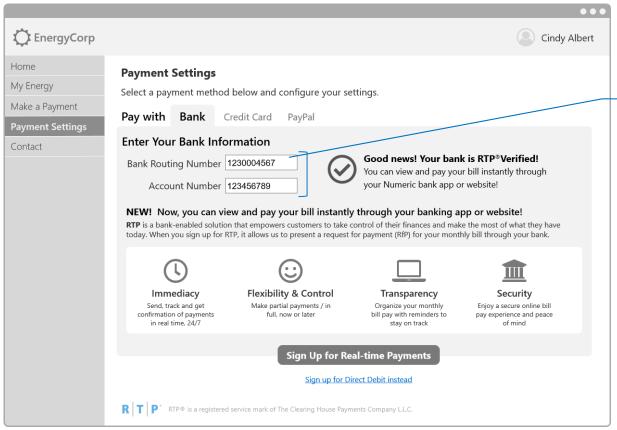


Payment Successful – Process Flow





Customer Requests for RfP at the Biller Website



In case the customer bank account details are already saved with the biller, these fields should appear as non editable/ greyed out. Customer can simply select RTP as the payment method*

Payment Successful – Prototype Screens with Field Level Data (1/4)

Scenario - Successful Payment

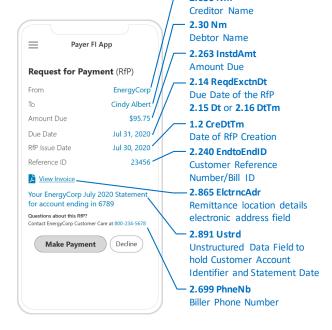
A financial institution has received a RfP (pain.013) message on behalf of their customer through the RTP network

- Customer bank validates that their customer is eligible to receive the message
- Financial Institution then notifies their customer through their preferred mechanism (app, email, text)
- Customer authenticates with FI to view the details of the message

For every pacs.008 payment message, a corresponding response from the receiving bank will be sent in the form of a pacs.002.

This will be the first indicator to the sending bank that it can notify its customer that the payment was successfully received or if another action is required (see page TBD)









Payment Successful – Prototype Screens with Field Level Data (2/4)

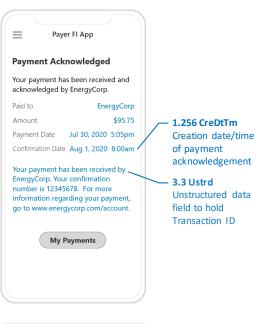


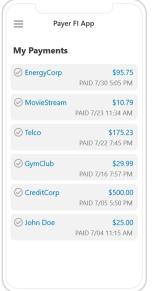
Payment Successful – Prototype Screens with Field Level Data (3/4)



Payment Successful – Prototype Screens with Field Level Data (4/4)

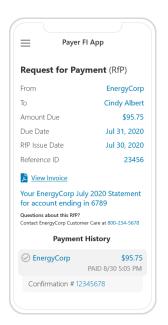
When a camt.035 (payment acknowledgement) is received, information can be pulled from pacs.008 and/or pacs.002 to present the full details to the customer.





Payer views payment in

context of other RfPs



Payer UX

Paver views confirmation # and additional info

pacs.002 status details displayed to Payer

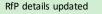
Payer FI

Biller FI

camt.035 sent with acknowledgement details



Paver views acknowledgement details in RfP







End of process flow

Payment Configuration for Minimum and Statement Balance

- 2.650 Nm 2.650 Nm Creditor Name Payer FI App Paver FI App Creditor Name 2.30 Nm pain.013 message would contain Request for Payment (RfP) Debtor Name Select Payment Amount account information available to 2.943 Amt From CreditCorp CreditCorp 2.943 Amt Statement Balance biller, including account info supplied James Smith Statement Balance Statement Balance by the Payer when registering with \$1,250.09 \$1,250.09 2.263 InstdAmt Statement Balance If Type=FULL in data field the biller to receive RfPs 2.942, then use the amount Min Payment Due 09/01/2020 Amount Due Minimum Amt Due \$25.00 \$25.00 in 2.943. Sep 1, 2020. Due Date Other Amount Issue Date Aug 17, 2020 2.263 InstdAmt Reference ID 54321 Amount Due - Funding source(s) presented by the Payer FI View Statement 2.14 RegdExctnDt Make Payment from Due Date of the RfP Your monthly CreditCorp statement Select Account for account ending in 1144. Payments 2.15 Dt or 2.16 DtTm made before 12:00 Midnight ET will **Payment Date** be considered on time. 09-01-2020 Contact CreditCorp Customer Care at 800-234-5678 Review & Pav Cancel **Make Payment** Decline Payer logs in Payer views Payer configures **Payer UX** to their FI app request details payment details Continue Payer FI displays RfP to payment Payer FI details to Payer review and send Biller FI



Payment Successful (Partial / Modified Amount) – Prototype Screens

Receive RfP notification

View RfP details

Modify the payment

Review and make the payment

Receive payment verification

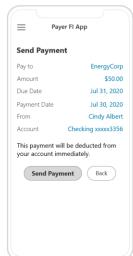
View list of due/paid RfPs on the dashboard

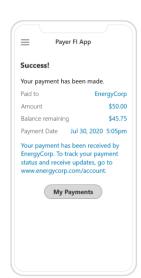
B2C | Bill, Manual Payment, Modified Amount





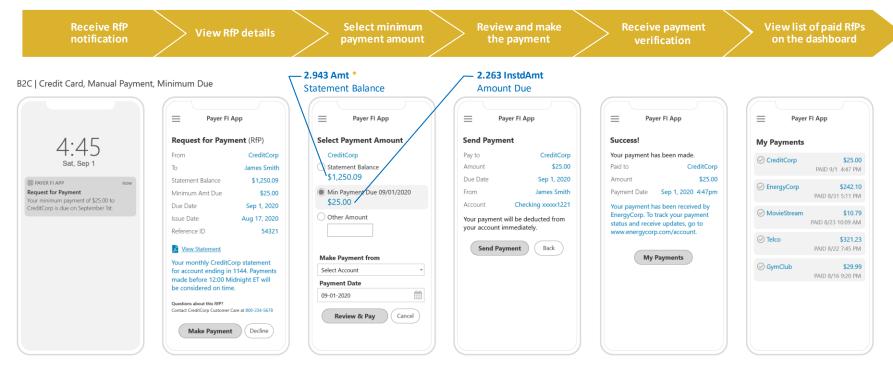








Payment Successful (Minimum Amount) - Prototype Screens



^{*} If Type=FULL in data field 2.942, then use the amount in 2.943.

Payment Successful (Full Amount) – Prototype Screens (1/5)

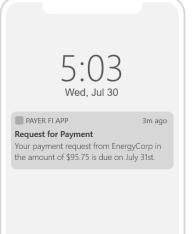
Receive RfP notification and login to the providing one-time mobile device

Accept RfP by

View list of RfPs; Select RfP due and view details

make payment in full

Receive payment verification;





This is a one-time screen that appears when customer receives a bill from the biller for the first time



Payment Successful (Full Amount) – Prototype Screens (2/5)

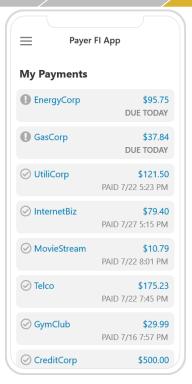
Receive RfP notification and login to the mobile device Accept RfP by providing one-time consent

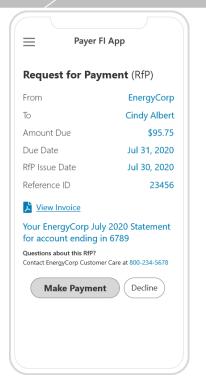
View list of RfPs; Select RfP due and view details

Review details and make payment in full

Receive payment verification;
View list of paid RfPs on the
dashboard

View payment acknowledgement







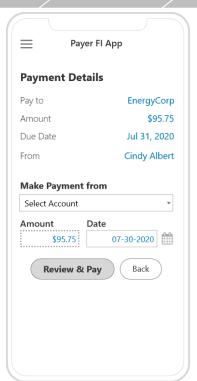
Payment Successful (Full Amount) – Prototype Screens (3/5)

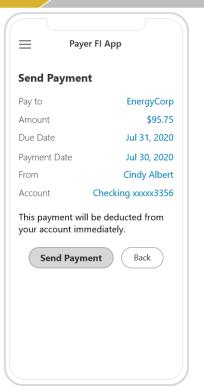
Receive RfP

Accept RfP by >providing one-time

View list of RfPs; Select RfP due and view details

Review details and make payment in full Receive payment verification;





Payment Successful (Full Amount) – Prototype Screens (4/5)

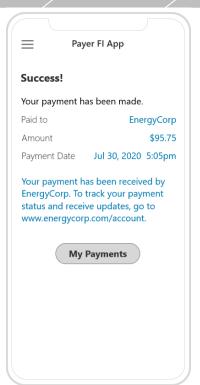
Receive RfP

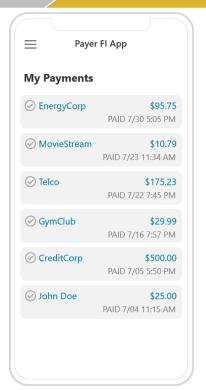
Accept RfP by >providing one-time

View list of RfPs; Select RfP due and view details

make payment in full

Receive payment verification; View list of paid RfPs on the





Payment Successful (Full Amount) – Prototype Screens (5/5)

Receive RfP

Accept RfP by >providing one-time

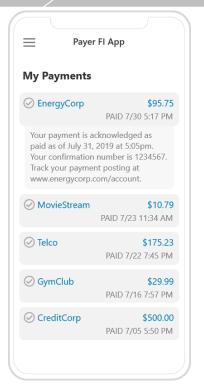
and view details

make payment in full

Receive payment verification;

View payment

5:17 Fri, Jul 31 PAYER FI APP now Payment Received Your payment has been received by EnergyCorp.



2. Customer Unable to Receive an RfP – Setting the Stage

Customer Unable to Receive an RfP



Context

A customer may not be able to receive RfPs due to several reasons. For example:

- Customer's FI is not enabled to receive RfPs or send RTP payments
- Customer may have opted out of receiving RfPs from a particular biller
- Customer is not digitally enabled with his/her FI



FI Guidelines

Customer FI should check the reason for customer being unable to receive RfPs, and advise the customer based on the below guidelines -

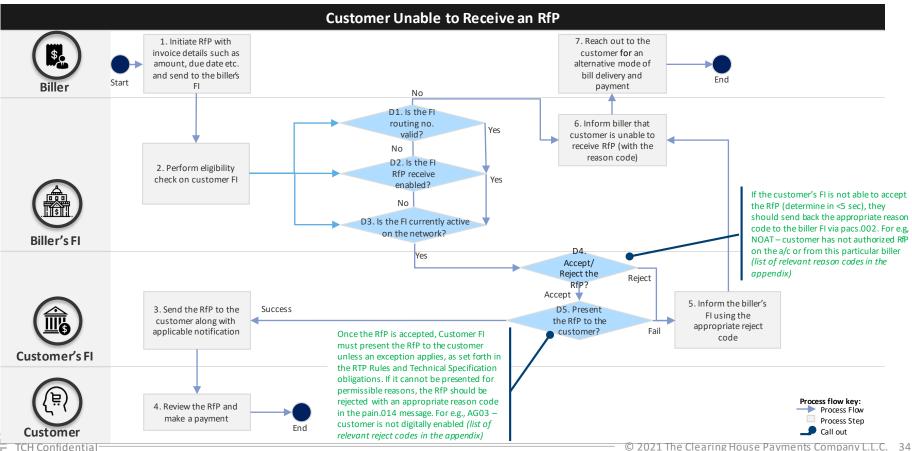
- If the customer's FI is not RTP payment enabled: Customer will not be able to use RTP products and services until their FI is RTP payment-enabled. Customer may be contacted by the biller for an alternative mode of bill delivery and payment in such a scenario
- If the customer has opted out of receiving RfPs from a particular biller: Customer FI may consider reminding the customer that they will not receive RfPs from this particular biller, and may guide the customer to update preferences if the customer wants to start receiving RfPs from the biller again
- If the customer is not digitally enabled with his/her FI: Customer should be advised on the next steps to become digitally enabled based on existing standard operating procedures, and set up preferences for using RTP products and services (e.g., bill pay)

Customer Unable to Receive an RfP – Scenarios

Sce	nario	Expected action from Customer's Bank	Expected action from Biller's Bank	Expected action from Biller
1. Customer is not digitally enabled		 Accept the RfP and send back pacs.002 status message Attempt to present RfP to the customer. If RfP cannot be presented, send pain.014 with AG03. The bank may consider contacting its customer to encourage them to enroll in digital services 	 Inform the biller that customer is unable to receive the RfP, along with the reason code (pain.014 with AG03) 	 Reach out to the customer for an alternative mode of bill delivery and payment Record that the customer is not digitally enabled
2. Customer is digitally enabled but opts out	a. Opt out preferences saved for the first time	 Accept the RfP and send back pacs.002 status message Present the RfP to the customer. If the customer declines and selects 'opt out' as the reason, save preferences and send pain.014 with NARR* 	 Inform the biller that customer opted out of receiving RfPs from the biller, along with the reason code (pain.014 with NARR) 	 Save customer preferences Reach out to the customer for an alternative mode of bill delivery and payment
	b. Opt out preferences already saved with the bank	 Reject the RfP and send back pacs.002 with NOAT 	Inform the biller that customer has not authorized RfPs on their account, along with the reason code (pacs.002 with NOAT)	 Save customer preferences Reach out to the customer for an alternative mode of bill delivery and payment



Customer Unable to Receive an RfP - Process Flow



3. Customer Ignores/Declines an RfP – Setting the Stage

Customer Ignores / Declines an RfP



Context

Once a customer receives an RfP, he/she may ignore or decline an RfP for any reason, including:

- Customer has made a payment in full through another channel
- Customer does not recognize the biller
- The requested amount is different from the invoice amount, or any other reason

Note: The Sending Participant FI must include an applicable reject reason code in its response to an RfP (pain.014)*



FI Guidelines

Below guidelines may be followed if a customer ignores/declines an RfP-

- Customer has made a payment in full through another channel: Customer can choose to ignore the RfP if the payment has already been made in full through another channel, which should be reflected in the biller account within the standard SLA time (associated with that payment method / channel). RfP would expire if no action is taken by the customer before the expiry date set by the biller
 - **Note:** If the RfP expires before the customer is able to make a payment, they should be advised that they may still owe a payment, to reach out to the biller to receive a new RfP for the same invoice or an updated invoice, using existing biller communication channels, and fulfill the latest RfP obligation on their bill. Biller to determine the next appropriate course of action (e.g., send a new RfP for the same invoice or a new invoice)
- Customer does not recognize the biller: Customer can choose to ignore the RfP received from an unknown biller and inform his/her FI about the unrecognized RfP. The Customer FI should check whether the customer has requested to receive RfPs from that biller
- The requested amount is different from the invoice amount, or the customer has paid partially through another channel: Customer can expect the old RfP to be cancelled and receive a new / reissued RfP based on updated invoice details (amount, due date, etc.). Customer may also be contacted by the biller through existing communication channels to guide on next steps



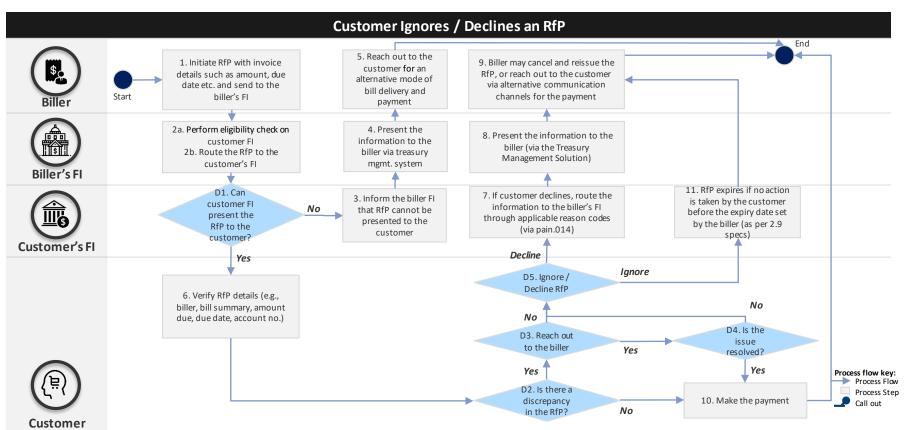
Prototype Link

Customer Ignores/Declines an RfP

*Note for FIs: The Response to RfP (pain.14) message specification provides certain reject reason codes that can be included in the message, as well as an option for additional narrative information.

This is a mandatory field and the reject reason codes from the message specification (https://www.theclearinghouse.org/payment-systems/rtp/-/media/30ef24a893324095bb2ea5df08a156dc.ashx) can be incorporated into an FI's interface for display to the customer

Customer Ignores / Declines an RfP – Process Flow



Note - RTP® 2.9 technical specifications allow the biller to set an expiration date in an RfP. If a customer does not take any action on the RfP by the expiration date set by the biller, the RfP may expire.

Customer Declining an RfP – Prototype Screens (1/4)

Receive RfP notification on the mobile device

Log in to the mobile

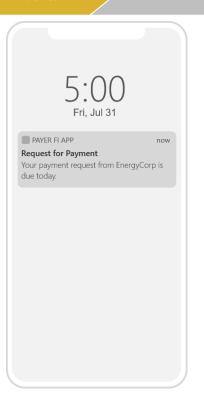
View RfP details

Select a reason to decline the RfP

ecline the payment

Receive decline confirmation

View declined RfP details on the dashboard





Customer Declining an RfP – Prototype Screens (2/4)

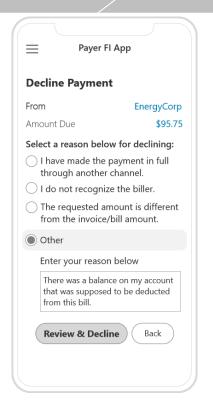
Receive RfP notification on

View RfP details

decline the RfP

View declined RfP details on the dashboard





Customer Declining an RfP – Prototype Screens (3/4)

Receive RfP notification on

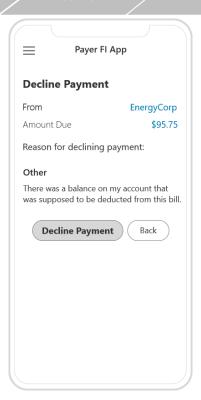
View RfP details

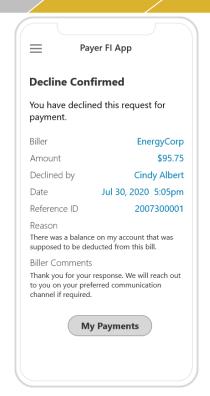
decline the RfP

Decline the payment

Receive decline

View declined RfP details on the dashboard





Customer Declining an RfP – Prototype Screens (4/4)

Receive RfP notification on the mobile device

og in to the mobile device

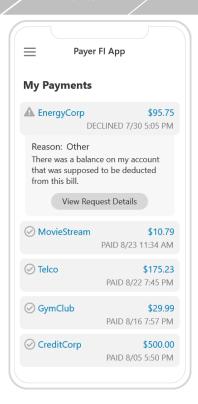
View RfP details

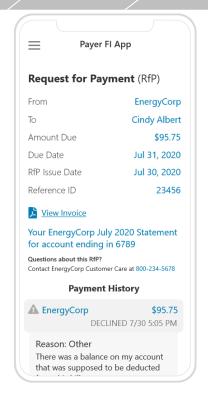
Select a reason to decline the RfP

ecline the payment

Receive decline confirmation

View declined RfP details on the dashboard





4. RTP Payment Fails / Gets Rejected – Setting the Stage

Payment Fails / Gets Rejected



Context

A customer's real time payment may fail / be rejected due to -

- **Technical issue** at the **customer's FI**/Sending Participant or the **biller's FI**/Receiving Participant side (e.g., FI not live on the RTP network when the payment is initiated, etc.)
- b) Specific conditions set up by the biller for the RfP sent (e.g. biller does not accept payments for an amount that exceeds the amount due specified in the RfP)



FI Guidelines

Below guidelines may be followed in case a payment fails / gets rejected -

- If the payment cannot be made due to an FI's technical problem: The customer's FI may have a retry process (based on their current state business rules) in place along with appropriate customer communication. If the payment still fails, customer can be advised to try again later
 - Note: An alternate payment method may be suggested to customers to complete the payment in case of a payment failure (dependent upon customer FI capabilities)
- If the payment fails due to specific conditions set up by the biller: Customer should be communicated the rejection reason and advised on next steps (for e.g., please try again later, please contact the biller etc.) based on existing standard operating procedures

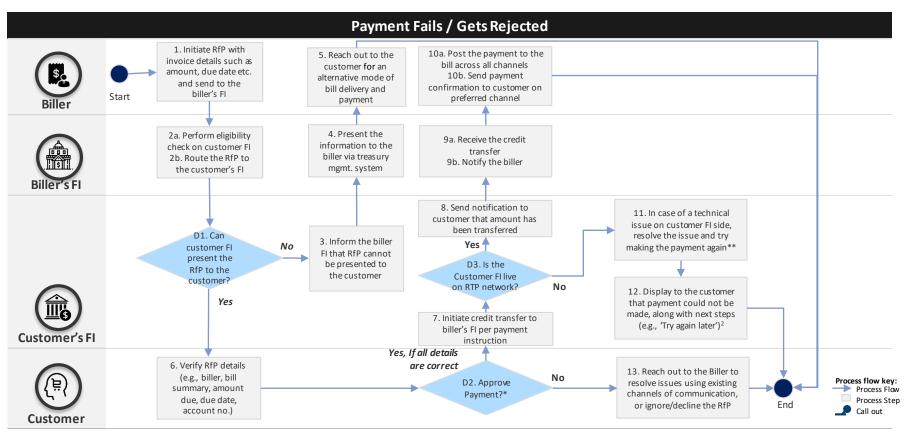


Prototype Link

RTP Payment Fails / Gets Rejected

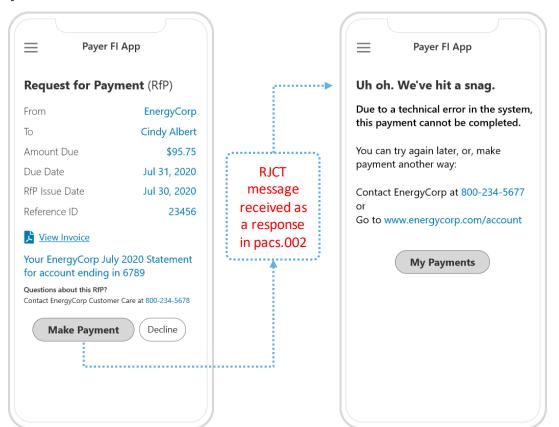


RTP Payment Fails / Gets Rejected – Process Flow





Payment Cannot be Made Due to FI Technical Error



The customer may have to reach out to the bank or the biller depending upon the reject message displayed on this screen -

- If the payment fails due to network issues, the customer's bank may request the customer to try again later. The customer's bank may retry a transaction before requesting a customer to "Please try again later". The frequency of retries may be determined by the customer's bank based on their current state business rules
- If the payment fails due to other reasons (e.g., insufficient balance, blocked account etc.), the customer's bank should provide applicable message to the customer along with next steps (For e.g., please try again later, please call our help desk for further information, please contact the biller etc.)

RTP Payment Fails / Gets Rejected (Pre-conditions set up by Biller) – Prototype Screens

Receive RfP notification on the mobile device

View RfP details

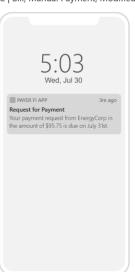
Enter payment

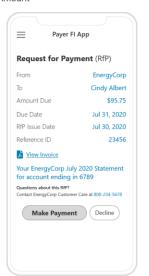
Review and make the

Payment is rejected; Check

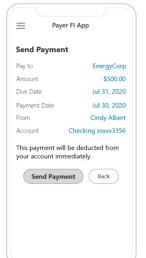
View rejected RfP on the dashboard

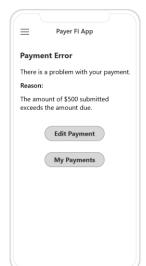
B2C | Bill, Manual Payment, Modified Amount













5. Customer Schedules a Payment – Setting the Stage

Customer Schedules a Payment



Context

A customer may choose to schedule a payment if he/she does not want to pay it immediately, providing him / her with better control and flexibility. Once they schedule the payment, a credit transfer is made to the biller as per the scheduled date selected by the customer

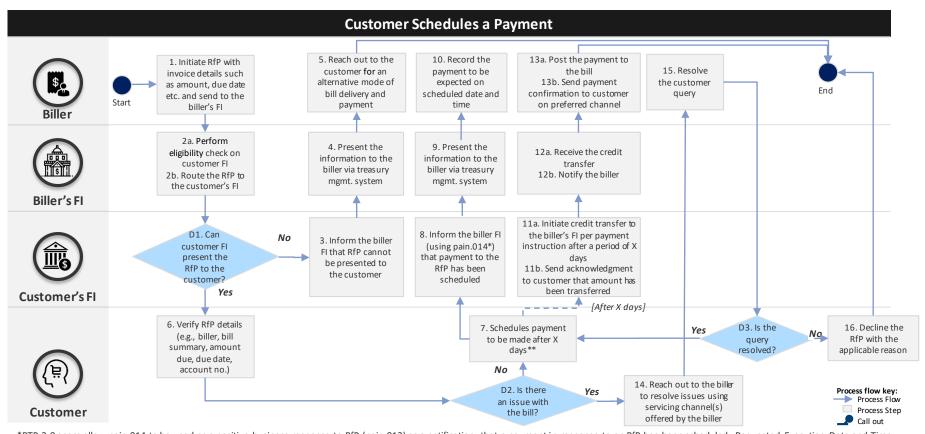


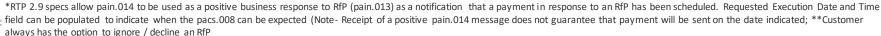
Prototype Link

Customer Schedules a Payment



Customer Schedules a Payment – Process Flow





Customer Schedules a Payment for Amount Less Than the Maximum Amount Allowed – Prototype Screens

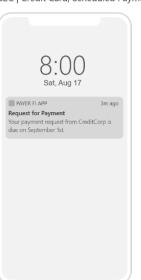
Receive RfP notification on the mobile device

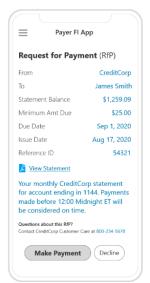
View RfP details

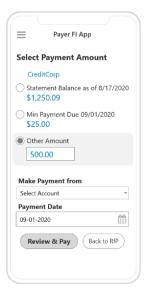
Select the payment date and amount: Schedule the payment

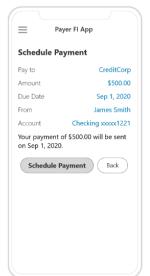
Receive confirmation for payment being scheduled View scheduled payments on the dashboard

B2C | Credit Card, Scheduled Payment, Modified Amount

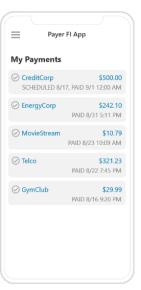












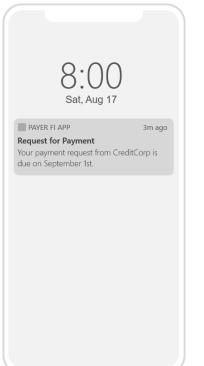
Customer Schedules a Payment for Amount Less Than the Maximum Amount Allowed (1/3)

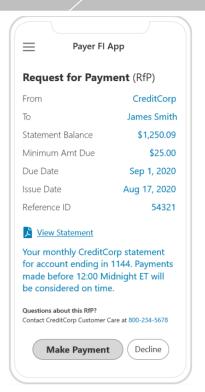
Receive RfP notification on the mobile device

View RfP details

Schedule the payment

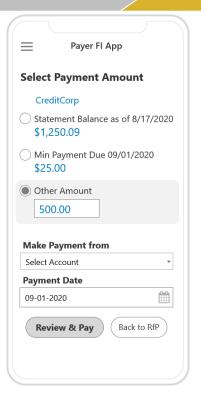
payment being scheduled

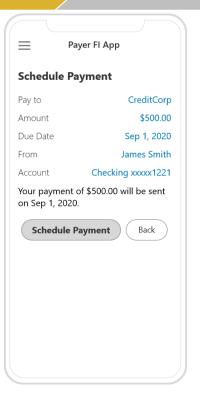




Customer Schedules a Payment for Amount Less Than the Maximum Amount Allowed (2/3)

Receive RfP notification on View RfP details Select the payment date and amount; Schedule the payment





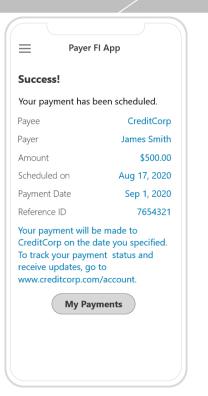
Customer Schedules a Payment for Amount Less Than the Maximum Amount Allowed (3/3)

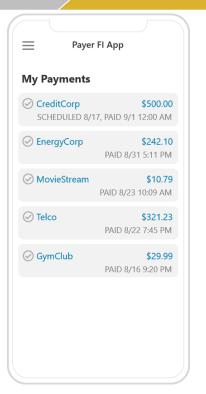
Receive RfP notification on the mobile device

View RfP details

Select the payment date and amount; Schedule the payment Receive confirmation for payment being scheduled

View scheduled payments on the dashboard





Customer Schedules a Payment for Amount More Than the Maximum Amount Allowed – Prototype Screens

Receive RfP notification on the mobile device

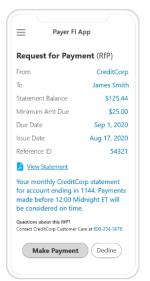
View RfP details

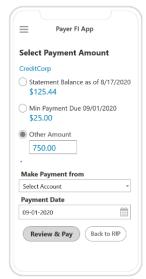
Select the payment date and amount; Schedule the payment

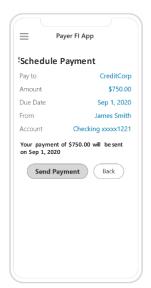
Payment not scheduled: View payment error details View scheduled payment error message on the dashboard

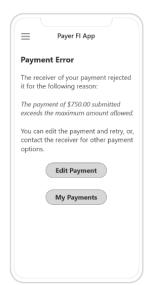
B2C | Credit Card, Scheduled Payment, Modified Amount

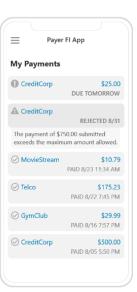










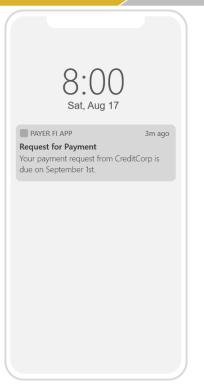


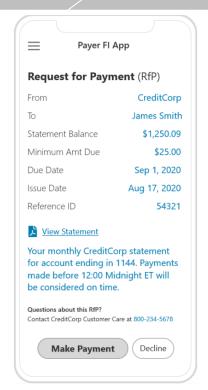
Customer Schedules a Payment for Amount More Than the Maximum Amount Allowed (1/3)

Receive RfP notification on the mobile device

View RfP details

Schedule the payment



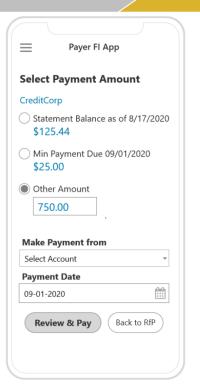


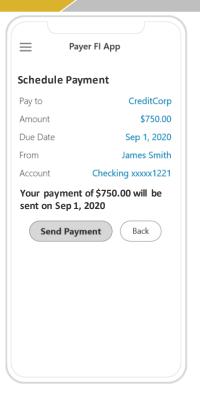
Customer Schedules a Payment for Amount More Than the Maximum Amount Allowed (2/3)

Receive RfP notification on

View RfP details

Select the payment date and amount; Schedule the payment





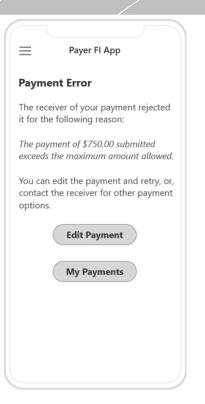
Customer Schedules a Payment for Amount More Than the Maximum Amount Allowed (3/3)

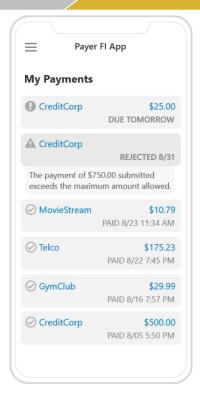
Receive RfP notification on

View RfP details

Schedule the payment

Payment not scheduled; View payment error details View scheduled payment error message on the





6. Customer Makes an Erroneous Payment – Setting the Stage

Customer makes an Erroneous Payment



Context

Customers may make an erroneous payment in cases such as –

- Customer accidently adding a zero and paying more than was requested by the biller in the RfP
- Duplicate payment made (one through the RfP received, and another through a different payment channel)

In such cases, the customer may seek a refund for the payment made in error

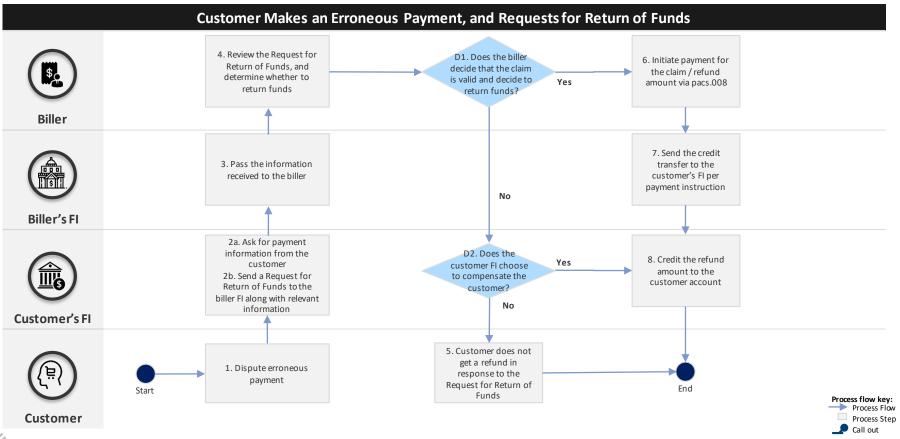


FI Guidelines

Below guidelines may be followed by the customer FI (as appropriate) –

- An FI may use the Request for Return of Funds process to request the Receiving FI to return the payment that was made in error. (Consumers may have rights under Regulation E for errors caused by the Sending FI)
 - ☐ Customer may report the erroneous payment to his/her FI
 - Customer FI may send a Request for Return of Funds message to attempt to recover funds from the Biller FI in the event of a customer dispute regarding an RTP payment
 - □ It is a Biller FI's decision whether it will return funds in response to a Request for Return of Funds; returning funds in response to a Request for Return of Funds is always voluntary
 - ☐ In some cases, the Biller FI will choose to return funds. In other cases, the Biller FI will choose not to return funds and the customer FI may choose to compensate its customer anyway. In such cases the customer FI will absorb the cost associated with compensating its customer
- An FI may also advise customers to reach out to the biller for refunds, which may be handled by billers based on existing business processes and policies. Biller should inform the customer about the refund status based on existing standard operating procedures

Customer Makes an Erroneous Payment – Process Flow





C

7. Biller Cancels an Already Issued RfP – Setting the Stage

Biller Cancels an Already Issued RfP



Context

A biller may cancel an existing RfP under the following scenarios –

- Customer received an RfP with incorrect bill details (e.g., amount, date, etc.)
- Customer has already paid the bill partially through another channel. In this case, the biller may cancel the existing RfP, and reissue another RfP with the updated bill amount due

Note: Biller may use existing communication channels to inform the customer of the reason for cancelling the existing RfP, and issuing a new one



FI Guidelines

Below guidelines should be followed in case the existing RfP is cancelled by the biller –

 The customer may view the cancelled RfP but may not be able to respond to it with an RTP payment (the customer may make a payment based on next steps communicated by the biller. E.g., make a payment via another channel, make a payment to the new/reissued RfP, etc.)

Note: 1) Biller should communicate to the customer (through standard comm. channels) about the reason for cancelling an existing RfP, and provide applicable reference document / bill

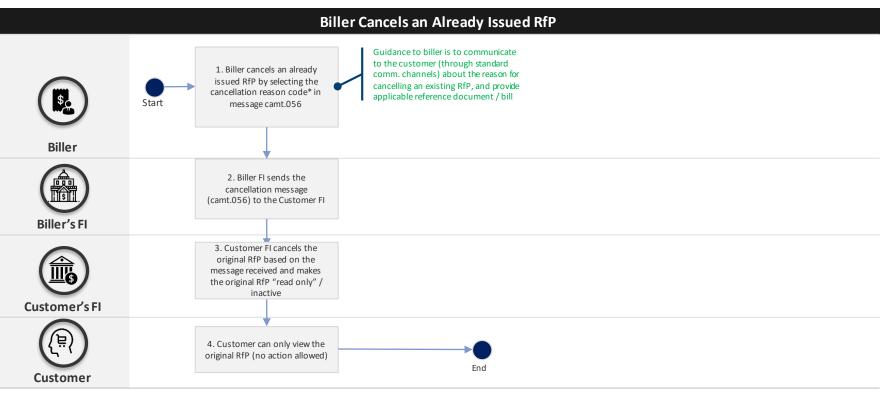
2) Customer should refer to the latest RfP along with biller communication to decide on next steps



Prototype Link

Biller Cancels an Already Issued RfP

Biller Cancels an Already Issued RfP – Process Flow



Note – *A biller may choose to cancel an RfP for various reasons; biller FI may use the appropriate reason code to convey the reason of cancellation to the customer FI e.g., AM09–Amount in RfP not correct, DUPL – Creditor FI sent two RfPs (duplicate), UPAY – Customer paid using another channel. After cancelling an already issued RfP, a biller may choose to send a new RfP to the customer using pain.013 message for a scenario where the amount was incorrect (AML9)



Process flow key:
Process Flow

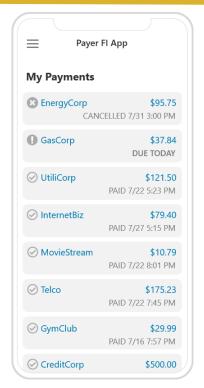
Biller Cancels an Already Issued RfP – Prototype Screens

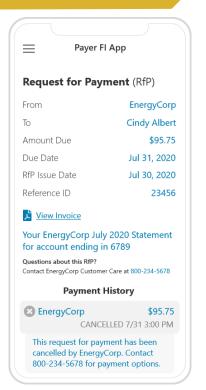
Receive RfP cancellation notification on the mobile device

View cancelled RfP on the dashboard

Select cancelled RfP to view details

Thu, Jul 31 PAYER FI APP now Request for Payment Cancelled Your payment request from EnergyCorp has been cancelled.





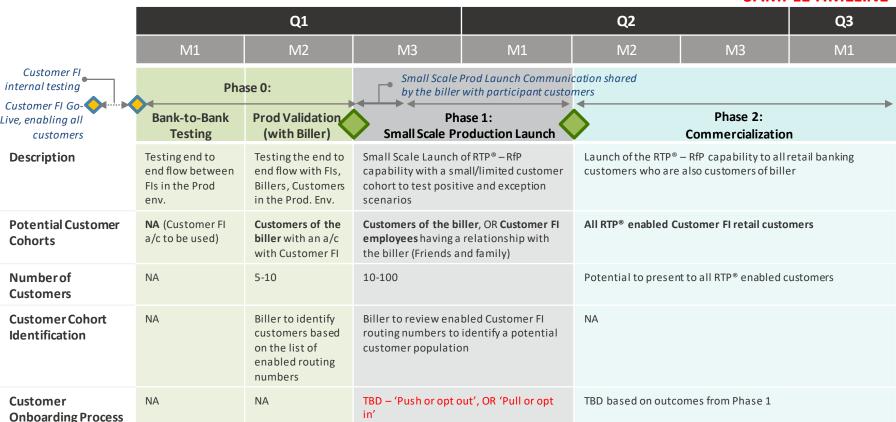
Path to Commercialization



Recommended Phased Approach to Commercialization

Go/ No-Go Decision

SAMPLE TIMELINE



Appendix



RTP® BillPay Payment Flows

Access the samples below for click-through prototypes of RTP BillPay payment flows.

Customer Receives an RfP and Makes a Successful Payment (in full)

https://theclearinghouse.invisionapp.com/console/share/PV1Q775B37/495152364

Payment Successful (Partial / Modified Amount)

https://theclearinghouse.invisionapp.com/console/share/PV1Q775B37/495310228

Payment Successful (Minimum Amount)

https://theclearinghouse.invisionapp.com/console/share/PV1Q775B37/495873297

Customer Ignores/Declines an RfP

https://theclearinghouse.invisionapp.com/console/share/PV1Q775B37/495943844

RTP Payment Fails / Gets Rejected

https://theclearinghouse.invisionapp.com/console/share/PV1Q775B37/495942812

Customer Schedules a Payment

https://theclearinghouse.invisionapp.com/console/share/PV1Q775B37/495871163

Biller Cancels an Already Issued RfP

https://theclearinghouse.invisionapp.com/console/share/PV1Q775B37/495943157



Customer feedback on desired features (1/2)

An individual FI may choose to enable features from the below customer wish list based on their desire to differentiate thems elves and offer better customer experience*

	Features requested by customers during the testing phase					
Financial Planning and Organization	Ability to calculate interest rate penalties and flat late fees compared across bills					
	Ability to provide guidance from the FIs on which bill payments to make (to reduce interest rates or pay off near-zero remaining balances)					
	Ability to send biller notifications and explanations for interest rate changes					
	Ability to provide alerts of any changes in the biller's policies or fee structure					
	Ability to provide visibility into flexible bill deadlines or bills without late fee					
	Ability to send notification for bill payments that will affect credit scores					
	Ability to update on weekly or monthly bank account balances					
	Ability to prioritize the RfPs (e.g. based on due date, late fee, etc.) and use the bill pay calendar view for planning (incl uding offline viewing)					
	Ability to sync/integrate bill pay calendar with phone/apple, Google, and/or Outlook calendars					
	Ability of the customer to set preference on certain deposit money to get auto-allocates to bill pay					
	Ability to provide bank alerts of risk of overdraft					
	Ability to round up bill payments and deposit the rounding into a savings account					
	Ability to provide help during tax time with organizing deductions					
Security	Ability to provide notifications of suspicious activity or security breaches					
	Ability for the system to time-out when not in use for security purposes					
	Ability for customers to use unique one-time codes, voice recognition, and/or 4 digit codes for extra log-in security					

Customer feedback on desired features (2/2)

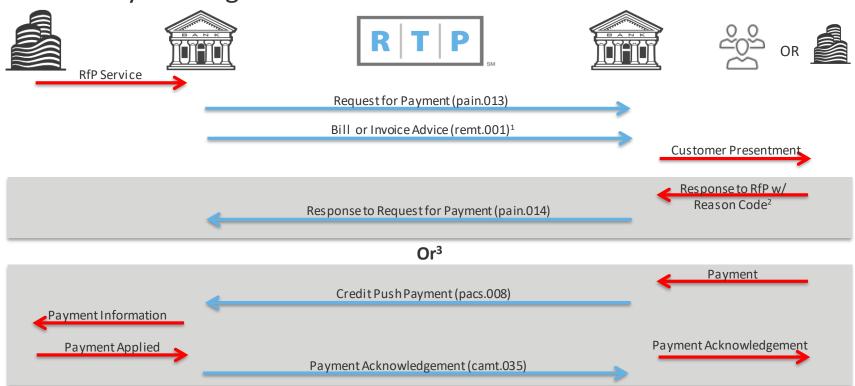
An individual FI may choose to enable features from the below customer wish list based on their desire to differentiate thems elves and offer better customer experience*

	Features requested by customers during the testing phase				
Initiate RfP	Ability to indicate to the customer that an RfP exists in case customer attempts to use an alternative (to RfP) to pay for his / her bill				
	Ability to "snooze" bill pay notifications received by the customer				
	Ability to send notification for when contracts with billers are ending in advance of an auto-renewal so that customers can change elected service(s)				
Approve Payment Instructions	All methods of directly contacting the biller customer service (call, chat, email, website)				
	Ability for a customer to view an RFI drop down (customized by the biller) with common queries raised to the biller				
	Ability to use self-service RFIs for bill inquiries and exception handling				
	Ability to receive "read receipts" from the biller once an RFI message is read				
	Ability to use "quick pay"/Apple Pay capabilities to use RTP® to pay for common goods (like groceries, etc.)				
Payment Acknowledgment	Ability to view, search and run reports on historical bill payments (requested period is up to 6 months) using several search parameters e.g., name of biller				
	Ability to view promotions and offers in the form of contextual message along with the acknowledgment message from the biller				
	Ability to export the payment confirmation to maintain records offline or outside of the bank app				



2

RTP® Bill Pay Message Flow



Note:

- 1 A bill or invoice is optional related to a Request for Payment and can be included as a remote link on the pain.013 or as a stand alone message via the remt.001
- 2 Response could be initiated by the customer's FI or the customer
- 3 The customer could initiate a response, payment or choose to do nothing related to received Request for Payment



List and Usage of ISO and Proprietary Reason Codes

ISO Message	Reason Code	Description and Usage
Pacs.002	AG03	Transaction type not supported / a uthorized on this account — This is used by RTP® if the FI is not supporting/certified for RfP. Could also be used by FI to indicate end customer account does not support. In this case, the FI will have to determine in < 5 seconds if customer is not digitally enabled. If not, FI could accept the RfP and send backpain.014 with a reject code (refer to pain.014 codes)
	AM09	Amount received is not the amount agreed or expected
	AM14	Transaction Amount exceeds limit agreed between FI and client. This is used to reject a pain.013 if the amount exceeds the amount that the payer would be permitted (by the payer FI) to send in a pacs.008
	NOAT	Receiving Customer Account does not support/accept this message type. Used in response to a Request for Payment when the Debtor customer has not authorized RFP on the account or for the particular initiator of the RFP
Pain.014	AC06	Blocked account; Account specified is blocked, prohibiting posting of transactions against it
	AG01	Transaction for bidden on this type of account (formerly NOAT / NoAgreement)
	AG03	Transaction type not supported / authorized on this account - to be used for customer not digitally enabled and constant account - to be used for customer not digitally enabled and constant account - to be used for customer not digitally enabled account - to be used for customer not digitally enabled account - to be used for customer not digitally enabled account - to be used for customer not digitally enabled account - to be used for customer not digitally enabled account - to be used for customer not digitally enabled account - to be used for customer not digitally enabled account - to be used account - to be used account - to be used
	AM09	Amount received is not the a mount agreed or expected -us ed by customer if problem with amount of the RFP and customer if problem with amount of the RFP and customer if cu
	CUST	Customer Indicates Payment will not be made
	MD07	End Customer Deceased
	NARR	Narrative reject with additional information provided
	SL12*	Creditor on black-list of debtor [Exact description to be updated]
Camt.056	AM09	Wrong Amount – Amount in Request for Payment was not correct
	DUPL	Duplicate – Creditor FI submitted a second unique RFP for a single customer request
	UPAY	Undue Payment – Payment has been made through a nother payment channel