

RTP® Network Biller Playbook

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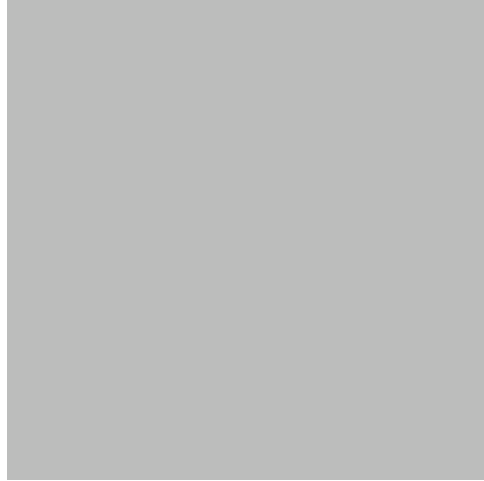


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01: What is the Biller Playbook?

Purpose and Objectives

The Biller Playbook describes RTP capabilities from a biller's perspective and outlines a tactical approach for operationalizing real-time capabilities **as an additional payment method**.

The Playbook helps billers prepare for RTP payments with a focus on business considerations and technology and operational readiness. It includes easy-to-use checklists and templates.

The following pages provide recommendations for best practices, guidelines, FAQs, examples and details to assist the biller in implementing RTP capabilities.

01 Biller Playbook: purpose and objectives

Includes the purpose and objectives of the playbook, highlights RTP capabilities from a biller's perspective and outlines a tactical approach for operationalizing RTP payments.

02 Understanding the RTP network and Request for Payment (RfP)



Describes the RTP network and its important characteristics. Clarifies the role of the RTP network in the payments ecosystem. Provides Request for Payment definition, RfP prototype screens, RfP messaging flow, key bank obligations associated with RfP and an RfP use case scenario.



03 Preparing for RTP payments



Provides guidance for billers about working with their financial institutions that may help accelerate the implementation of RTP payments. Highlights an approach to building a case for change and ensuring technology and operational readiness. Shows customer enrollment on the biller interface through sample prototype screens.

04 Supporting Documentation

Includes biller guidelines for bill pay, a checklist for developing RTP capability readiness, frequently asked questions and links to additional documentation and resources.

05 Glossary of Terms

Defines terms commonly used throughout the Biller Playbook.

06 Contact Us

Provides a list of individuals who can provide further information on Biller Playbook topics

02: Understanding RTP Payments and Request for Payment (RfP)

What are RTP Payments?

With RTP payments, consumers and businesses can send and receive funds immediately from their bank accounts, 24/7/365. Financial institutions can leverage a variety of RTP capabilities – especially speed and messaging – to create unique offerings for their retail and corporate customers.

The RTP network is a credit push system, with no direct debits allowed. This ensures certainty of funds and reduces the risk of unauthorized transactions associated with traditional payment methods. The RTP network uses the ISO20022¹ messaging standard to share remittance information, create real-time status reports and initiate Requests for Payment (RfP). A biller may send an RfP, which is presented to the customer through their banking interface. The payment is made only when customer instructs its bank to initiate a Credit Transfer to ensure that customer is in control of the RTP payment.

RTP Characteristics

01

24/7/365 – The RTP network operates on a 24/7/365 model, which means the system is available for customers to send or receive payments at any time

Immediate Availability – Billers can receive the payment within seconds of the Customer initiating the transaction (once the customer opts in). The Receiving FI is required to make funds available immediately, except where necessary for legal or compliance purposes

02

03

Payment Certainty – Customers are not able to revoke or recall a payment once it has been authorized and submitted to the RTP network. However, there is a process to facilitate FI-to-FI communication around return of funds sent in error

Ubiquity – The RTP network is accessible by all financial institutions, regardless of size or charter type, and reaches the vast majority of U.S. account holders

04

05

Extensibility – Rich, flexible messaging functionality is included to support value-added products. For example, the RTP network provides messaging capability enabling a Request for Payment (RfP) directly via RTP network

Convenience – Users of the RTP network can initiate payments using a DDA account number and routing number. Alias-based payments may also be available through providers of payments services that use the RTP network for clearing and settlement

06

07

Cash Flow Control – The ability to send and receive payments immediately gives customers more control over cash flow, which is particularly important for cash-constrained small businesses and consumers

Adaptability – The RTP network has a flexible architecture to adapt to changing market needs

08

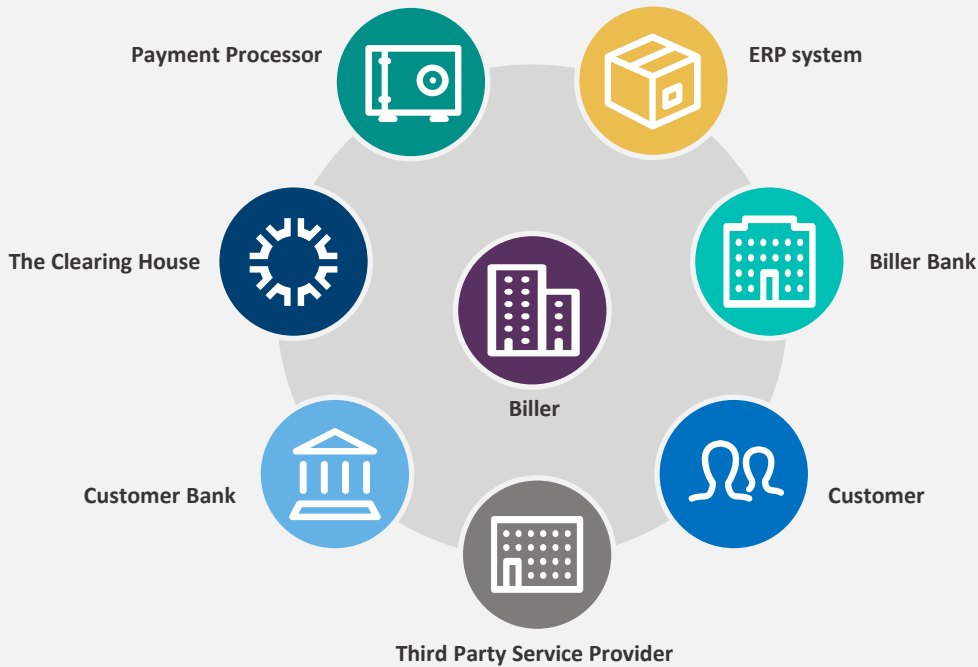
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Global Standards – The RTP network uses the ISO 20022¹ international standard for financial messaging








Note: 1. ISO20022 is an international standard for financial messaging. Please refer to RTP® Technical Specifications for more details.

01 What is the Biller Playbook?	02 Understanding RTP® payments and Request for Payment	03 Preparing for RTP® Payments	04 Supporting Documentation	05 Glossary of Terms	06 Contact Us
What are RTP Payments?	RTP Ecosystem	What is a Request for Payment?	How can a biller send a RfP and receive payment?	Key bank obligations associated with RfPs	C2B RTP payment scenario

RTP Ecosystem

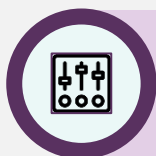


Illustrative RTP ecosystem

Stakeholders	Description
 Biller	Billers may submit a Request for Payment (RfP) to their bank (Biller Bank). The Biller Bank then sends the RfP to the customer’s bank through the RTP network. It is presented to the customer via their banking interface
 The Clearing House	The Clearing House operates the RTP network for the U.S. It provides real-time payments clearing and settlement capabilities and value-added messaging functionality
 Biller bank and Customer bank	Financial institutions (biller bank and customer bank) connect to the RTP network directly or through third-party service providers
 Customer	Customers accept or decline the RfP and communicate with the biller through the RTP network (ISO20022 messaging standard)
 Third Party Service Provider	A Third Party Service Provider provides a technical connection to the RTP network and acts on behalf of the financial institution (customer bank and biller bank) to send and receive RTP payment messages and other messages
 Payment Processor	Payment Processors offer application services on which new digital products can be built by the financial institutions (customer bank and biller bank)
 ERP system	ERP systems are biller software solutions that enable various functions in the biller organization and enable real-time billing and payment processing

What is a Request for Payment (RfP)? (1/2)

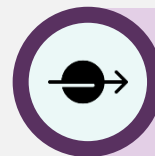
A Request for Payment (RfP) is a payment-related message (ISO20022 pain.013) that is sent by the biller to the customer through their respective financial institutions, to request for an RTP payment in response.



RfPs are **non-obligatory** and give the customer **greater control** over payment initiation



RfPs enable **safer transactions** through **secure** bank channels



RfPs provide context to the payment and enable **straight-through processing**

Key RfP benefits for Billers

Key RfP benefits for Customers

1

IMMEDIACY AND CERTAINTY

- **Real-time clearing and settlement:** Customer payments settled in real time, 24/7, providing the biller with immediate funds
- **Transaction certainty:** Immediate acknowledgement of RTP payments made
- **Reconciliation:** Transparency of bills linked to RfPs

2

CONSISTENCY AND SECURITY

- **Industry-standard features:** Common ISO20022 capabilities to ensure interoperability across financial institutions
- **Biller identification:** Biller identity verification / registration with its financial institution to minimize fraud risk*
- **Protection against unauthorized debits:** Customers initiate the credit transfer (credit push)

3

FLEXIBILITY AND COMMUNICATION

- **Configurable Alerts:** Configurable RfP reminders to the customer enhance their bill pay experience (dependent on alert capabilities of the bank)
- **Flexibility:** Ability to schedule future-dated payments, or make partial payments based on customer preferences
- **Self-service:** Direct communication between biller and customer for effective exception handling

4

CONTROL AND PRECISION

- **Updating RfPs:** Sending updated RfPs to provide the customer with the most up-to-date bill information (e.g., RfPs updated to reflect customer making a payment through another channel, etc.)
- **Receiving updated RfPs:** Enhanced customer experience by making a payment for the most updated bill (taking into account late fee, payments made through other channels, etc.)

*Note: RTP® Operating Rules include a warranty that an RfP is initiated for a "legitimate purpose". For information on required due diligence and other associated requirements, please refer "Requirements for Request for Payment" section under [RTP® Operating Rules](#)

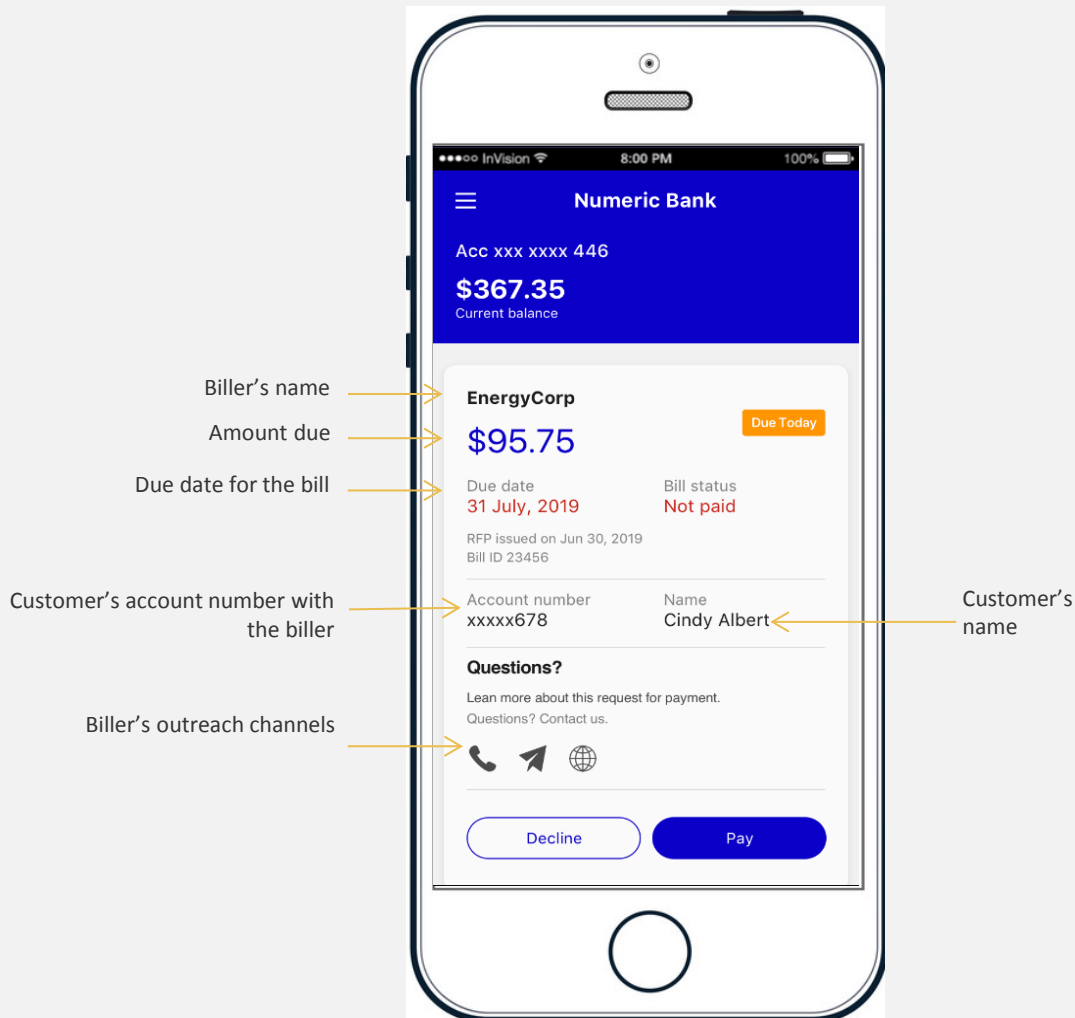
What is a Request for Payment (RfP)? (2/2)

Prototype Screen

The below (illustrative) prototype screen represents a sample RfP, with features on the mobile screen of a customer's banking app.

Note: The customer bank will choose the channel (web/mobile) through which an RfP is presented to the customer (web / mobile) and determine the customer experience.

For a bill pay prototype experience, visit [MVP* prototype link](#)



ILLUSTRATIVE

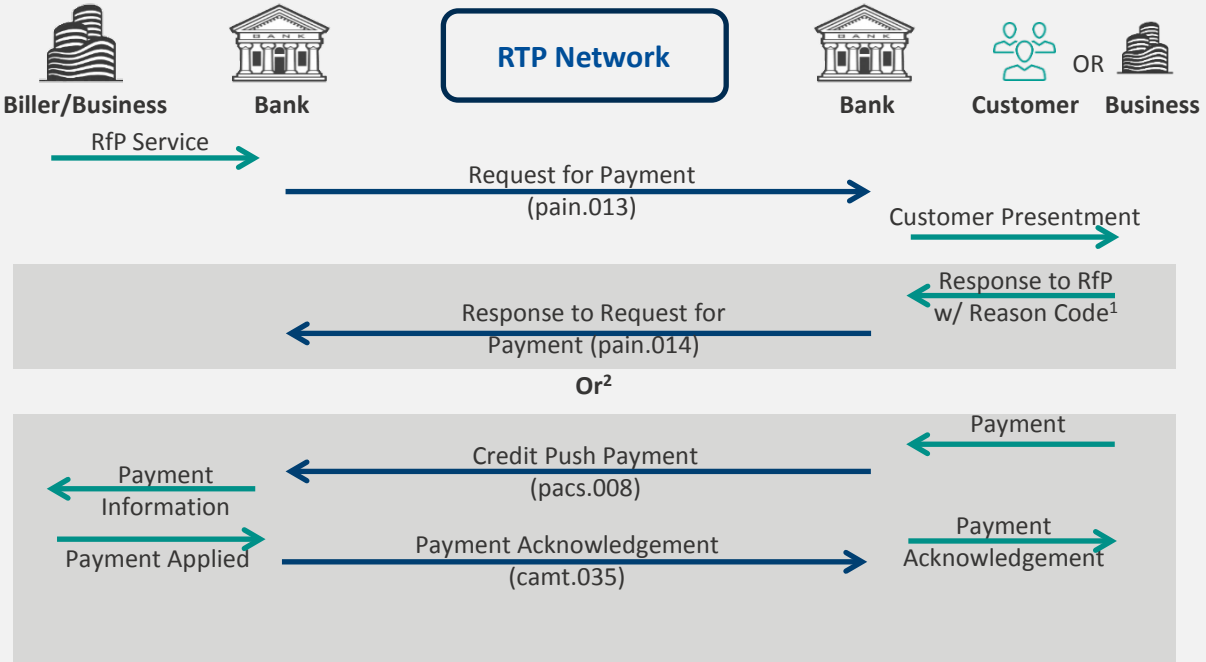
An RfP message has multiple fields defined in its **message structure**. It has XML tags for elements such as debtor account, amount due, due date, debtor address, financial institution identification and other such remittance information.

For a detailed description of Request for Payment <pain.013> message structure, refer to [Customer Documentation Request for Payment Message \(pain.013 & pain.014\)](#)

How Can a Biller Send a RfP and Receive Payment?

Request for Payment Message Flow

The below diagram illustrates the flow of information between different participants when a Request for Payment is initiated –





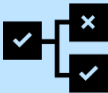
Note:

1 – Response could be initiated by the customer’s bank or the customer

2 – The customer could initiate a response, pay or choose to do nothing related to received Request for Payment

Term	Description
RfP Service	Real time API/batch call to the biller bank
Request for Payment (pain.013)	ISO20022 payment message sent by biller bank to the customer bank through the RTP network to request payment from the customer
Customer presentment	Request for Payment presented to the customer via web / mobile channel
Response to RfP w/ Reason Code	Message sent by customer or customer bank in response to the RfP received. In the case of RfP rejection, a reason code is sent along with the response
Response to Request for Payment (pain.014)	RfP response sent by the customer bank to the biller bank as per the message format and standard
Payment	Customer’s RfP acceptance and authorization of payment sent to the customer bank in order to initiate the RTP Credit Transfer from customer’s bank account
Credit Push Payment (pacs.008)	RTP Credit Transfer initiated from customer’s bank to the biller bank, as approved by the customer
Payment Information	Details of the payment (received from the customer bank) shared by the biller bank with the biller
Payment Applied	Biller posts the payment received from the customer against the customer’s account in their internal systems (e.g., CRM, etc.) – in batch or real-time
Payment Acknowledgement (camt.035)	ISO20022 payment acknowledgement message is sent to the customer by the biller through the RTP network
Message codes (pain.013, pain.014, pacs.008, camt.035)	Message codes as per ISO20022 messaging standard used by the RTP network

Key Bank Obligations Associated With RfPs (Per TCH RTP® Operating Rules)

Category	Bank Obligations per TCH Operating Rules
Legitimate Purpose of an RfP 	<ul style="list-style-type: none"> ▪ Subject to the RTP® Participation Rules and RTP® Operating Rules, a bank that is approved and authorized by TCH to send Requests for Payment may submit Requests for Payment to the RTP network. Such requests shall not constitute the initiation of a debit or impose any obligation on the customer to pay any amount to the biller. A Request for Payment may only be made for legitimate purposes, as defined in Rule VII(B)(3) of these RTP® Operating Rules. ▪ Legitimate Purposes for Requests for Payment – <ul style="list-style-type: none">  Requests for Payment initiated by a non-Consumer Customer are made for a legitimate purpose when they are sent to request payment for (i) a current sale or transaction; or (ii) an amount that is due, owed or otherwise agreed to be paid to the biller. <input type="checkbox"/> Requests for Payment initiated by a Consumer Customer are made for a legitimate purpose when they are sent to request payment from a Person* who (i) is known to the biller and (ii) would reasonably expect to receive the Request for Payment from the biller.
Biller Bank RfP Obligations 	<ul style="list-style-type: none"> ▪ The biller's bank that submits the RfP to the RTP network must – <ul style="list-style-type: none"> <input type="checkbox"/> Ensure that the Request for Payment complies with the RTP® Technical Specifications; <input type="checkbox"/> Comply with the Requirements for Request for Payment Customers; <input type="checkbox"/> Warrant to TCH and the customer's bank that the Request for Payment is made for a legitimate purpose and is not fraudulent, abusive, or unlawful; <input type="checkbox"/> Take corrective action with respect to a biller when a biller's bank determines, or should have determined based on information available to it, that the biller has initiated Requests for Payment that are not made for a legitimate purpose or are fraudulent, abusive or unlawful. Such corrective actions may include suspension of a biller's ability to initiate Requests for Payment and, under appropriate circumstances, the ability to receive RTP payments, as determined by the biller's bank or by TCH through Rules Enforcement Proceedings; and <input type="checkbox"/> Respond to RTP reports of abuse of Requests for Payment. ▪ If a Request for Payment is not delivered to the customer, the customer's bank is required to notify the biller's bank. The biller's bank is not required to notify the biller of the customer's bank's response to Request for Payment.

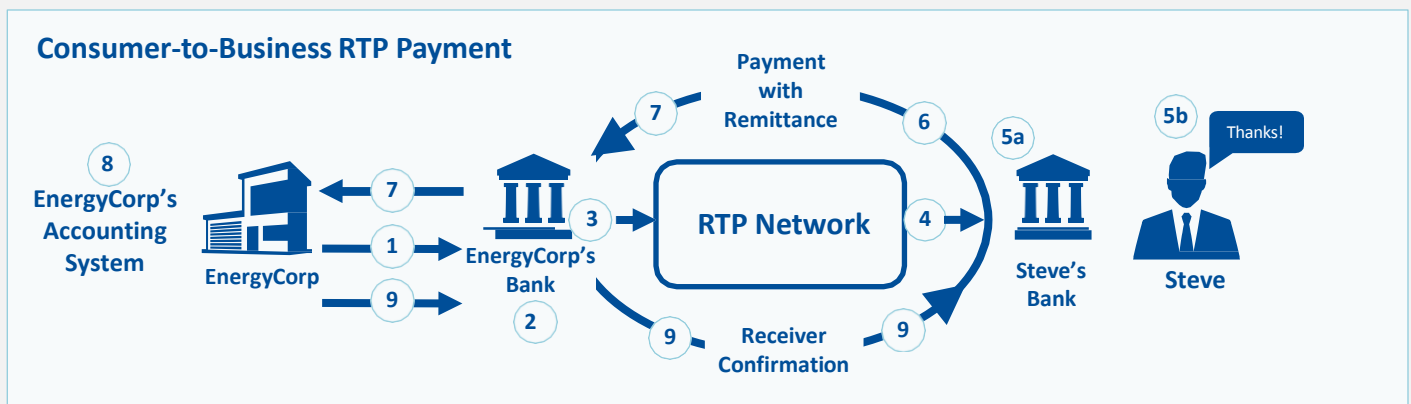
*Person: Any natural person or corporation, partnership, sole proprietorship, joint venture, or other form of entity or organization

Note: This is a summary view of bank (Participant) obligations associated with RfPs. To access the current, complete version of the RTP® Operating Rules, please refer to the following link: [RTP® Operating Rules](#)

The RTP® Operating Rules establish requirements for financial institution RTP Participants, and not those financial institutions' customers (e.g., billers); billers may have obligations related to RfPs, however, under their agreement with their financial institution.

Sample C2B RTP Payment Scenario

A consumer-to-business (C2B) transaction demonstrates that RTP network offers many features beyond traditional money movement. One example is a large utility business that wants to send electronic invoices to its customers, along with the ability for customers to view and respond immediately with an RTP payment.



Use case scenario: Steve, an EnergyCorp customer, is presented with a link from his bank's RTP network that displays the bill. An option to immediately pay all or a portion of the invoice is made available. Once Steve authenticates with his bank and authorizes a payment, his bank sends the payment directly to EnergyCorp's account while the remittance information is also delivered for immediate posting to the company's accounting system. EnergyCorp confirms receipt of the payment to Steve via the RTP network.

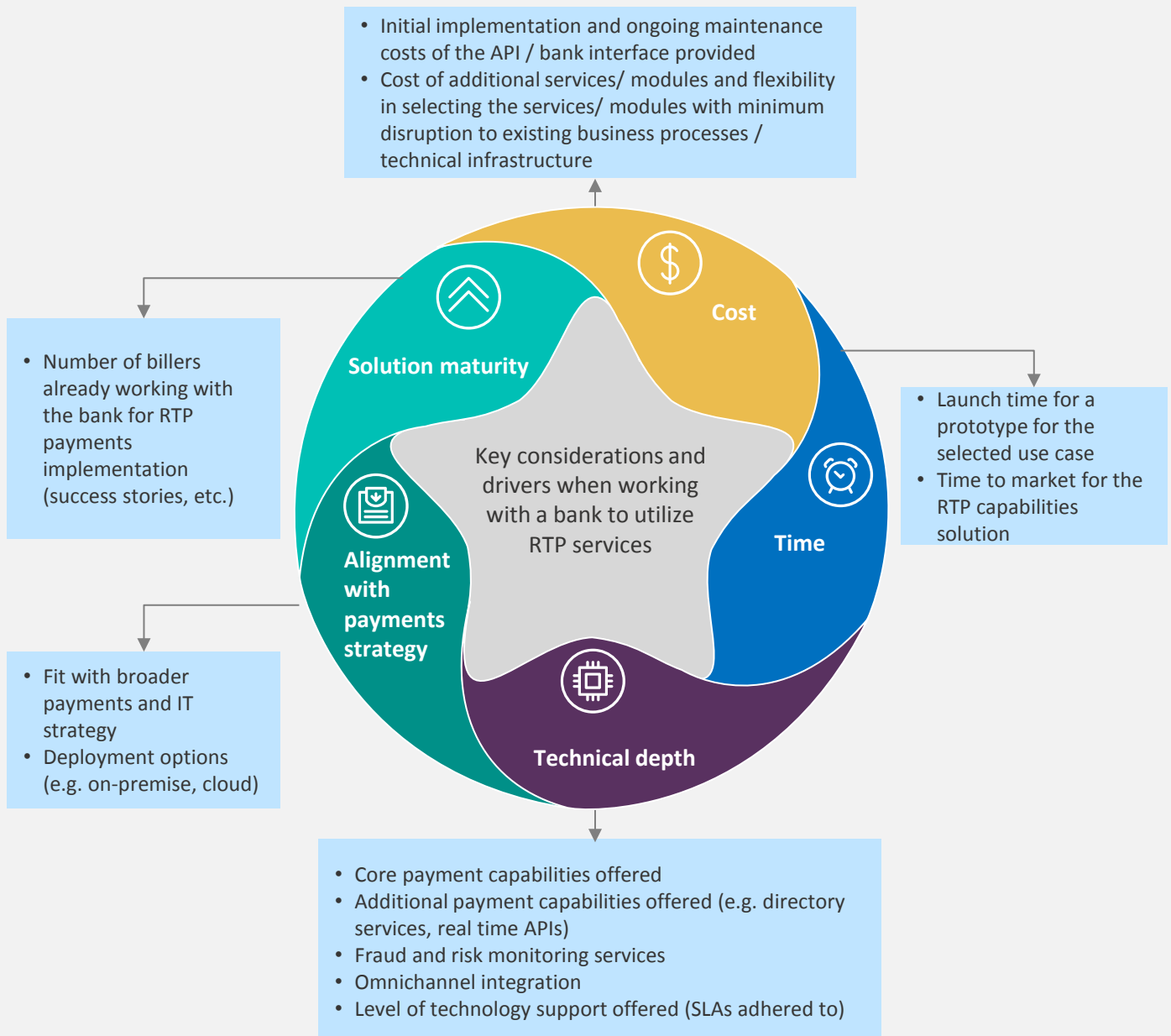
1. EnergyCorp creates an invoice in their billing system to be presented to Steve, their customer, for payment. They use their bank's treasury management system to generate a Request for Payment. The Request for Payment is sent to Steve's bank for distribution through the RTP network.
2. EnergyCorp's bank uses appropriate customer authentication and payment verification processes to verify EnergyCorp's personnel has authority to make payment requests.
3. EnergyCorp's bank submits the Request for Payment messages to the RTP network.
4. The RTP network validates the payment request and remittance details and forwards them to Steve's bank for distribution to the customer.
- 5.a. Once Steve's bank has received the payment request, it validates that he is eligible to receive RfPs. Steve's bank then posts the message to his online or mobile banking interface.
- 5.b. Upon authentication, Steve is presented with a RfP that has a "Pay Now" button. Upon selecting the "Pay Now" button, Steve is presented with a pre-populated payment message including all pertinent data (i.e., remittance information, payment amount, etc.).
6. Once the payment is authorized and submitted, Steve's bank forwards the payment and remittance message to EnergyCorp's bank via RTP network. Steve's bank also sends him a notification of the payment made.
7. EnergyCorp's bank informs EnergyCorp that the customer's payment, and related remittance data, has been received and funds are available in their account.
8. EnergyCorp receives remittance information into their accounting system via their bank's interface, and applies credit to the appropriate customer account.
9. EnergyCorp sends acknowledgement to Steve that payment has been posted via RTP network.

Note: The exchange of information between biller and customer through the RTP network goes beyond the remittance detail that typically accompanies C2B electronic payments. Remittance data is essential and allows the biller to apply payment to the correct invoice, account for any differences, and reconcile those differences. In this immediate payment example, the payment request, notification message, and confirmation message all provide additional value for a time-sensitive transaction.

03: Preparing for RTP Payments

Guidelines for working with the biller's bank to enable RTP network services

Working with your bank is essential in building real-time payment capabilities. Billers may consider the following framework to understand the services provided by their banks that may help accelerate their real-time payments implementation. Billers may want to weigh several factors to make sure their bank's services align with their organization's objectives, payment strategy and customer needs. A biller's bank enabled for RTP services will receive RFPs from all their customers and process, clear and settle the transactions on behalf of the biller.



Building a Case For Change (1/4)

RTP payments have the potential to reduce billers' costs associated with other traditional payment methods and improve overall efficiencies in a biller's organization.

Understanding the drivers of RTP payments costs and benefits, and socializing them within the organization may help billers build a case for implementing and offering RTP payments to their customers:

Benefits associated with providing RTP payments as a payment option (1/2)



Potential reduction in bill presentment costs

With the use of Request for Payment (RfP), billers may gradually move away from the need for physical bills. RfPs can potentially become an **alternate to physical and e-bills** in the future, eventually resulting in the reduction of bill presentment costs.



Potential savings over traditional payment methods

Billers may potentially save on various **fees charged on transactions** made through traditional payment methods (e.g., credit/debit processing). Such benefits may be passed by the biller to customers with RTP payment offers / discounts.



Savings on float cost and time

Current payment methods lead to float costs in the form of **interest costs to billers** between the time payment is credited to their account and the settlement time. There is also a **time cost** associated with current payment methods arising from delay in the time to process a payment. RTP payments can help avoid these float interest and time costs by ensuring instant payment processing and settlement.



Access to working capital

Settlement delays and uncertainty in payments associated with traditional payment methods such as ACH and checks **limit the billers' ability to finance working capital internally**, with many small billers needing to hold additional cash contingencies on balances to cover working capital requirements. This reduces their ability to recognize and respond to investment opportunities. RTP payments can ease these restrictions through faster processing of payments from consumers or billers.

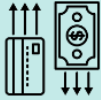


Access to external financing

Small and medium sized billers may benefit from real-time exchange of payment status information on payable invoices and receive real-time financing on accounts receivables

Building a Case For Change (2/4)

Benefits associated with providing RTP payments as a payment option (2/2)



Reduction in transaction and reconciliation time and cost

The time cost (travel time, waiting time) and production cost elements involved with ACH and check transactions can be significantly reduced with RTP payments.



Quick redressal of payment failures

Reduced uncertainty resulting from real-time information on payments, along with the ability to **respond earlier to payment failures** or delays may help billers avoid inefficiencies.



Increase in operational efficiency

Operationalizing RTP payments will create a fundamental shift in back office process efficiencies. Better reconciliation provided by RTP capabilities may help billers curtail costs associated with late payments, contact center calls, payment returns, etc. and enhance the overall operational efficiency.

Major costs associated with providing RTP payments as a payment option



One-time setup cost

Initial investment to set up the infrastructure, and hire additional resources, etc.



Recurring cost

Additional transaction fee paid to banks for using their treasury management system or to the processors for availing their processing service.

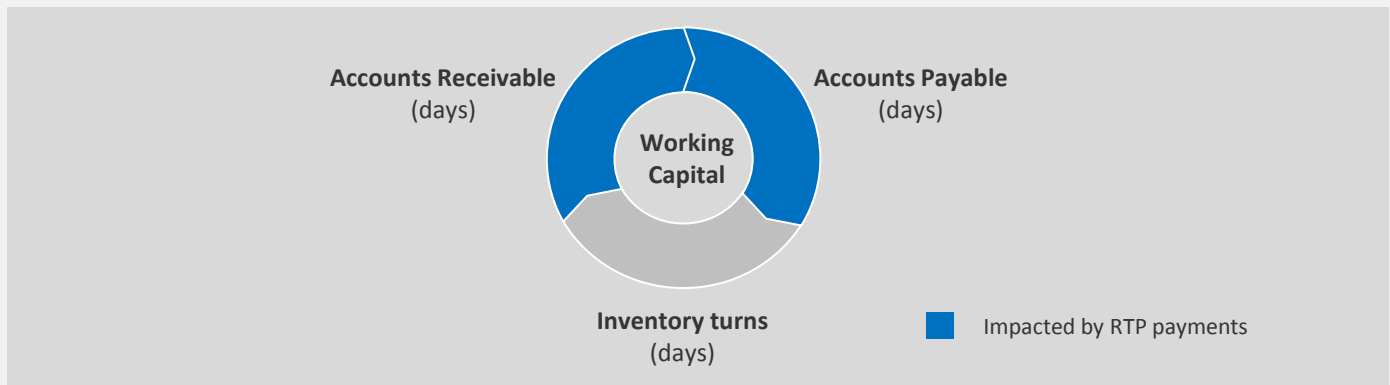
Note: Financial institutions that offer RTP services to their biller customers determine applicable transaction or other fees for those services.

Building a Case For Change (3/4)

Working Capital Management

Maintaining a threshold working capital and liquidity is critical for biller organizations that need enough funds to continue their day-to-day operations, and prepare for any economic downturn or unfavorable / unexpected business events.

There are three main components for working capital in a typical biller organization:



RTP payments shorten the timeframe for recognizing accounts receivables and accounts payables dramatically, thus accelerating the flow of commerce and reconciliation, and making liquidity management much easier for the biller. RTP payments also enable better visibility into cash flows to manage vital working capital.

Reduced payment delays, seamless billing processes, efficient bills collection processes and faster resolution of invoice disputes – all contribute towards reducing account receivables and thus better working capital management for the biller.

How RTP payments help in Working Capital Management



More effective use of cash flows – With accelerated cash conversion cycles and reduced latency in payment execution, billers may be able to maintain an optimum contingency cash buffer. Better payments' traceability and predictability can help billers get a better handle on liquidity. Such data allows them to make accurate assessments, preventing them from keeping an overly large budget buffer and freeing up funds to capture new opportunities.



Improved operational decision-making – RTP payments offer the ability to transmit more transaction data than other payment instruments (e.g., checks). With access to such data-rich transaction flows, biller organizations may achieve straight through processing efficiencies and greater insights into cash flows. This can allow them to improve their overall operational decision-making process.



Better liquidity and external financing need management – According to a 2019 Deloitte global survey*, businesses held a cash contingency equivalent to approximately 4.6% of annual sales, implying that a significant portion of businesses' revenue was held as a reserve and could not be used for internal financing of working capital. With RTP payments, billers may be able to forecast their cash positions better by tracking the movement of funds at any given time. This can also help small billers plan their funding requirements basis their actual cash positions rather than estimates.

As working capital management becomes more efficient, billers may witness reduced pressure on cash flow planning and forecasting as well.

*Deloitte conducted a survey of SME owners across a range of business segments and sectors, both in countries that have and haven't (yet) introduced real-time payments. We have used aggregate responses as a proxy for business sentiment in the US.

Source: [Deloitte 2019 'Economic Impact of Real Time Payments' research report](#)

Building a Case For Change (4/4)

Reconciliation

Automated reconciliation happens when the right level of data accompanies a payment transaction for invoice matching. The RTP network is based on the ISO20022 messaging standard, that allows participants to make use of additional information with-in the payment transaction. Along with the instant payment notification functionality, RTP payments also offer flexibility so that all the data needed to identify a payment and the exception reasons can accompany a payment transaction. This contextual information enables auto-posting and aids in automated reconciliation for businesses.

How RTP payments improve the reconciliation processes in a biller organization



Minimized payment inquiries – Instant payment posting in the biller internal ERP system and payment confirmation sent to the customer can help reduce the number of customer inquiries received by the biller. This can aid in reducing contact center costs for the biller.



Requirement of lesser resources dedicated to reconciliation – Automated reconciliation implies that billers can dedicate lesser resources to receivables posting and reconciliation. These resources can focus on some of the other core business needs of the organization.



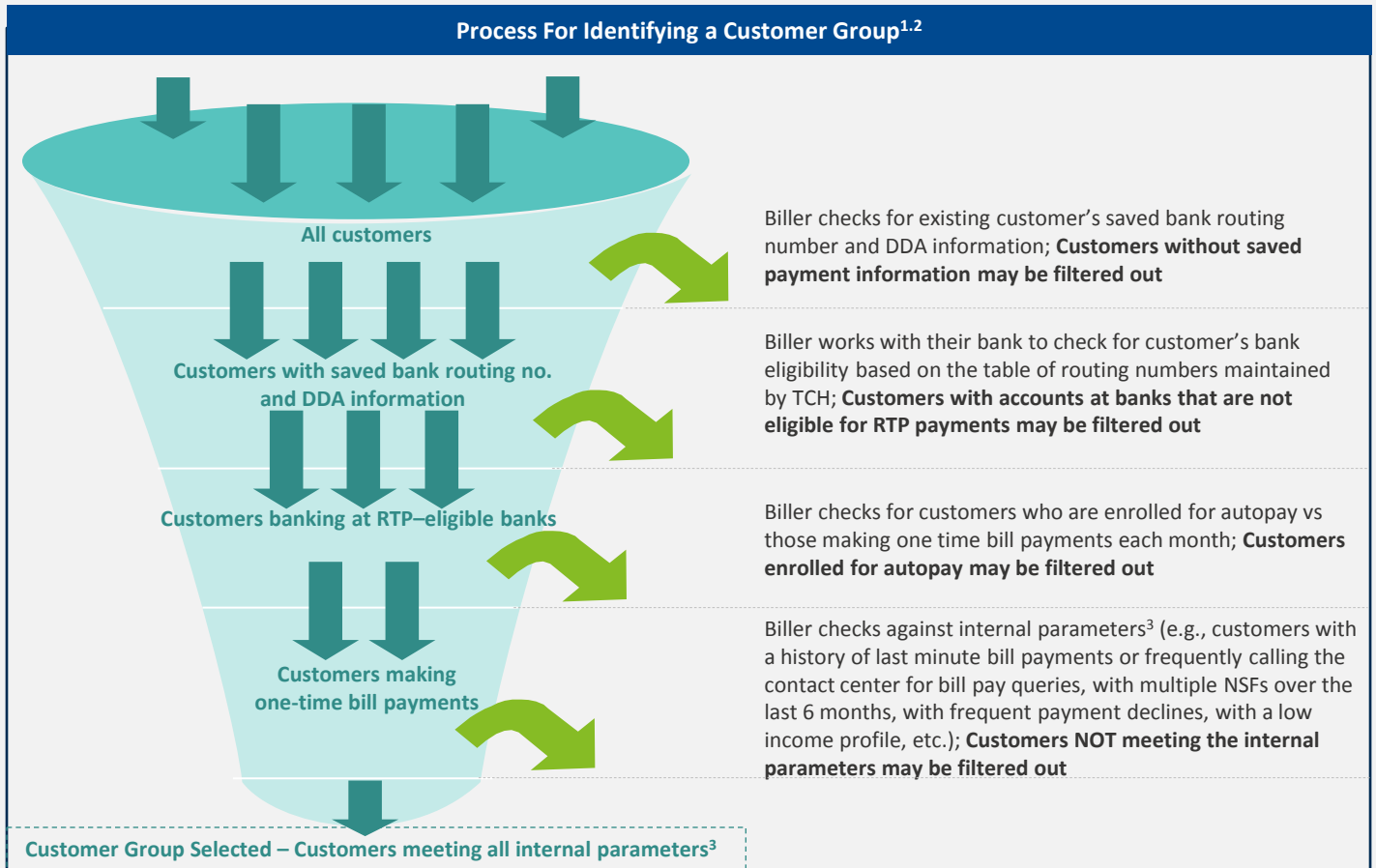
Better exception management – With readily available data, RTP payments make it possible to achieve efficiencies in exception management as well. This is complemented by enhanced posting and reconciliation capabilities of invoice-related information associated with the payment transaction. Vital payment data may be integrated with the biller organization's ERP system to attain even greater efficiency. This directly reduces biller's back-office costs as well.

Rolling Out RTP Payments in a Phased Manner

The first step in offering RTP payments as a payment method is to select the right target customer group:

- ❑ **For existing customers:** A biller may choose to offer RTP payment method to certain customer groups based on internal parameters, such as payment history or other factors, and have a phased roll out for other groups over a period of time
- ❑ **For new customers:** A biller may choose to offer RTP payment method to all its new customers

Depending upon the internal parameters identified by the biller, the following framework may be followed to identify the appropriate customer group to roll out RTP capabilities in a phased manner:



Footnotes

1. Biller may select multiple customer groups based on this framework, and **roll out RTP capabilities for each in a phased manner**
2. Once a customer group is identified, the **biller may want to consider checking for its RTP payments eligibility on a frequent basis** (frequency to be decided by the biller). This is because the following conditions might change with time –
 - ❑ Additional customers may save their bank routing number and DDA information with the biller
 - ❑ Customer's bank that was previously not RfP receive enabled, may have become enabled recently
 - ❑ Customers that were earlier not enrolled in autopay, may have enrolled recently (or vice versa)
 - ❑ Customer population meeting internal parameters might have changed recently
3. **The parameters listed above are illustrative, and not exhaustive.** It is up to the biller to determine the internal parameters used to identify customer groups for RTP payments

Building Technology and Operational Readiness (1/2)

RTP Network Value Chain

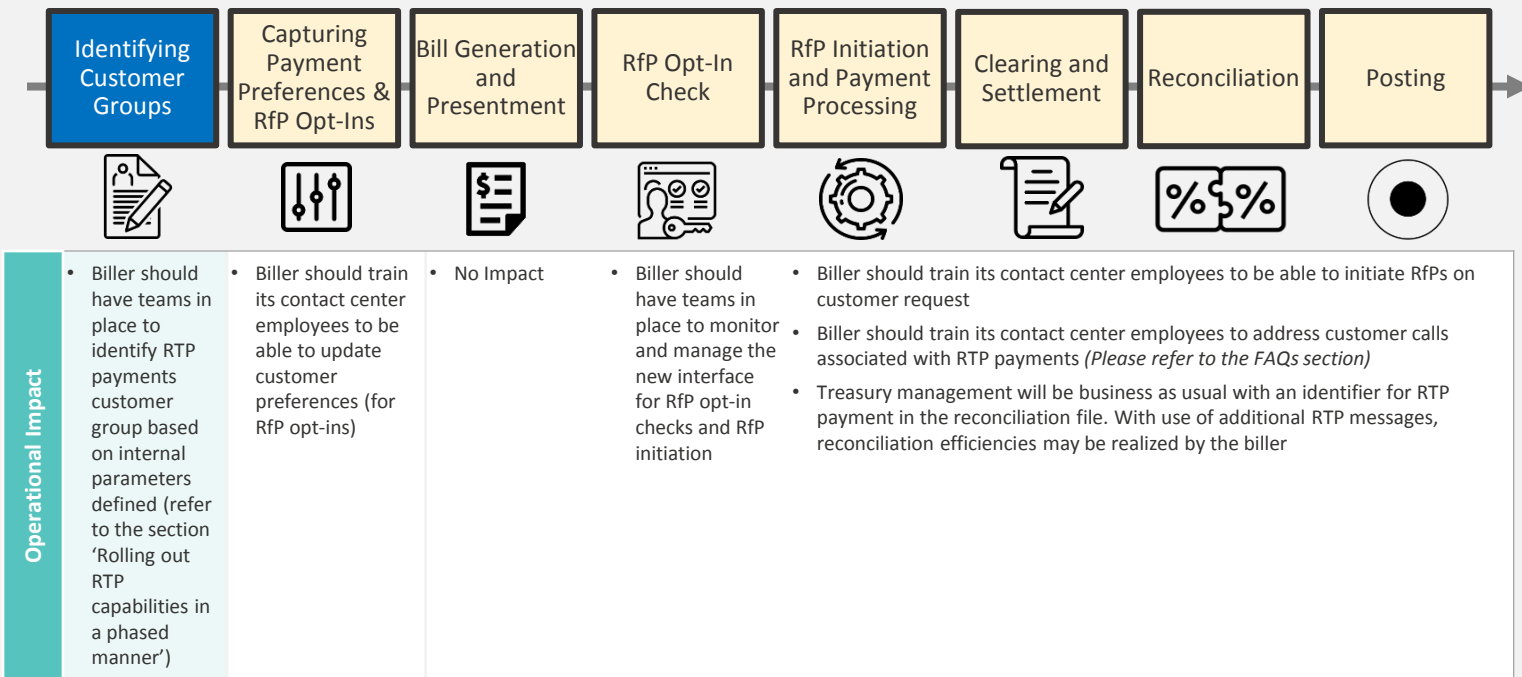
	Identifying Customer Groups*	Capturing Payment Preferences & RfP Opt-Ins	Bill Generation and Presentment	RfP Opt-In Check	RfP Initiation and Payment Processing	Clearing and Settlement	Reconciliation	Posting
Description	<ul style="list-style-type: none"> The biller identifies the preferred customer group for RfP enrollment, and informs / educates them about RfPs 	<ul style="list-style-type: none"> Customer (from the identified customer group) provides his/her payment preferences through different biller channels (web / mobile / IVR / contact center), and opts-in to make payments in real time through RfPs 	<ul style="list-style-type: none"> Billing system generates the bill (based on customer billing cycle) and presents it to the customer across channels based on their preferences 	<ul style="list-style-type: none"> Biller conducts RfP Opt-In checks on customer accounts that have invoices generated based on their billing cycle (best practice is to conduct RfP opt-in checks for each eligible customer a/c before the billing cycle) 	<ul style="list-style-type: none"> Biller bank initiates the RfP and sends it to the customer's bank (to be presented to the customer) Customer approves payment, and initiates credit transfer against the RfP 	<ul style="list-style-type: none"> RTP network facilitates real time exchange of funds initiated by the issuing banks Payment gets credited to biller bank in real time 	<ul style="list-style-type: none"> Biller conducts matching of transactions with original invoices generated across the value chain 	<ul style="list-style-type: none"> Biller posts payments made across applicable customer accounts and systems (for e.g., ERP and Billing System)
Channel s/ Mode		Web Mobile IVR CC	Paper Presentment Electronic Presentment	Batch	ODFI / Bank Processor	Batch Real Time	Batch Real Time	Batch Real Time
Tech Impact	<ul style="list-style-type: none"> NA 	<ul style="list-style-type: none"> Biller should follow existing processes to store payment preferences Biller should update its channels to provide eligible customers with a new option to pay their bills in real time through RfPs (RfP opt – in) 	<ul style="list-style-type: none"> Bill generation and presentment processes through existing channels (i.e., paper, e-bill) will continue to function as-is based on existing customer preferences 	<ul style="list-style-type: none"> Biller should run internal checks on customer accounts identified to confirm RfP opt - ins After RfP opt-in checks, biller should generate billing info for these bills due, which should be transmitted to their bank's treasury mgmt. system through APIs to generate an RfP 	<ul style="list-style-type: none"> To provide an update on whether the customer has actioned upon the RfP, biller's bank will either send RfP status files in batch to the biller or in real time through APIs Biller should be able to capture and store the status of the RfPs using the status file or from API response received either directly from their bank or the processor 	<ul style="list-style-type: none"> Biller may choose to automate checking the status of customer payments through their bank's treasury mgmt. system, and provide customers with real time acknowledgment for settled payments Biller bank will also provide the biller with a regular settlement file (based on mutually agreed upon frequency) 	<ul style="list-style-type: none"> Biller may explore efficiencies in reconciliation by automating the processes since additional reconciliation data may be available 	<ul style="list-style-type: none"> Biller should consider sending an immediate response back to the customer that the payment has been posted and the balance has been updated. This may require changes on the biller's ERP and posting platforms Billers should consider posting received RTP payments within 24 hours of receipt, or faster if possible.

*Billers and their banks should work together to formulate a customer education plan for RTP payments (e.g., by publishing relevant educational documents, etc.)

■ This stage is a prerequisite for the biller and will be valid in the early phase of a biller's plan towards operationalizing RTP payments

Building Technology and Operational Readiness (1/2)

RTP Network Value Chain



A simplified approach (for small billers)



Small billers may liaison with their banking partner to leverage TCH's RTP payments infrastructure, or a third party payments processor / payment facilitator/ aggregator to process RTP payments. These payment processors and existing banking partners can work together to build RTP capabilities for the biller.

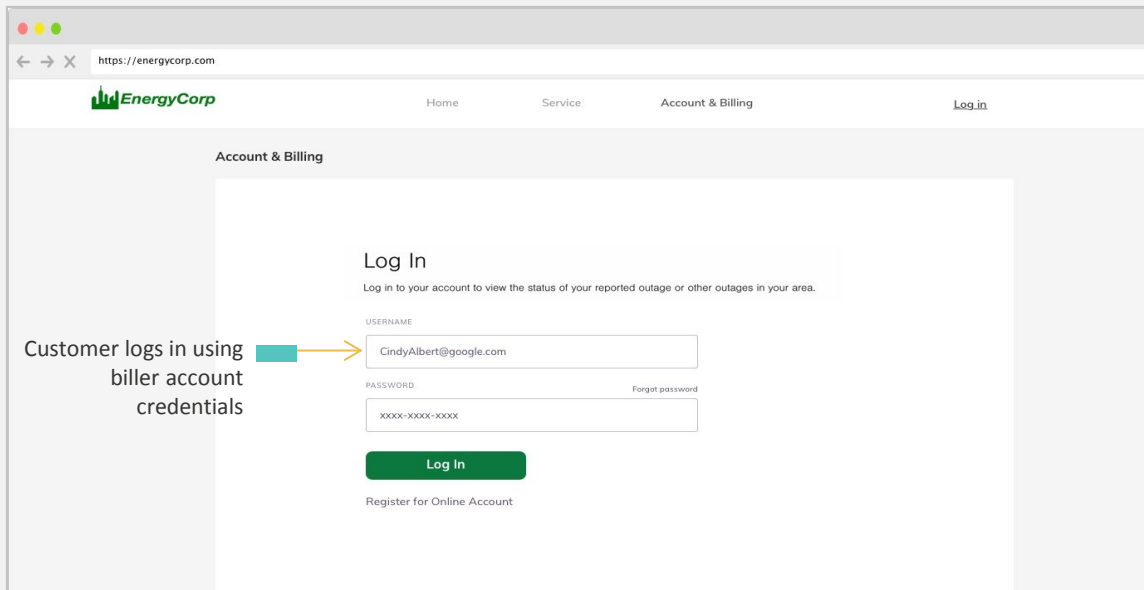
Billers planning to roll out real-time payments for their customers may consider reaching out to their processors or banking partners first to understand RTP payments as an additional payment method. This will help them gain a better understanding of how existing payment systems may be impacted by the adoption of real-time payments, and how workflows can be configured to mitigate any potential risks.

■ This stage is a prerequisite for the biller and will be valid in the early phase of a biller's journey towards operationalizing RTP payments.

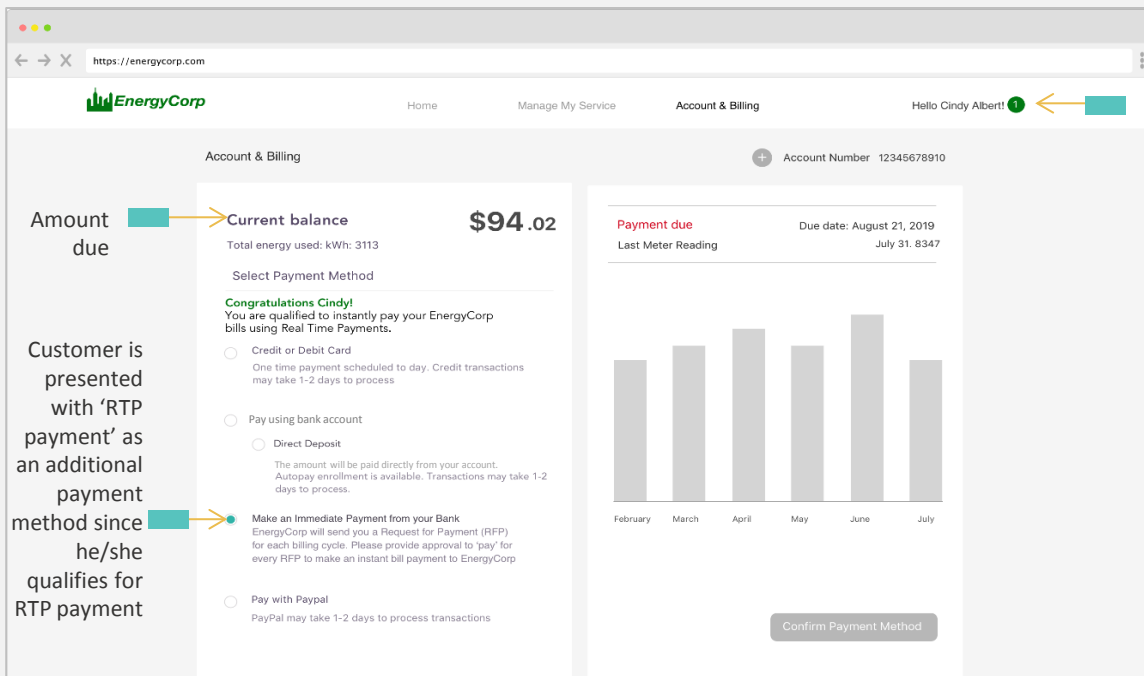
Customer Enrollment on Biller Interface

Customer Enrollment – Sample Prototype Screens

Use Case – Customer with a saved payment method qualifying for RTP payment



ILLUSTRATIVE

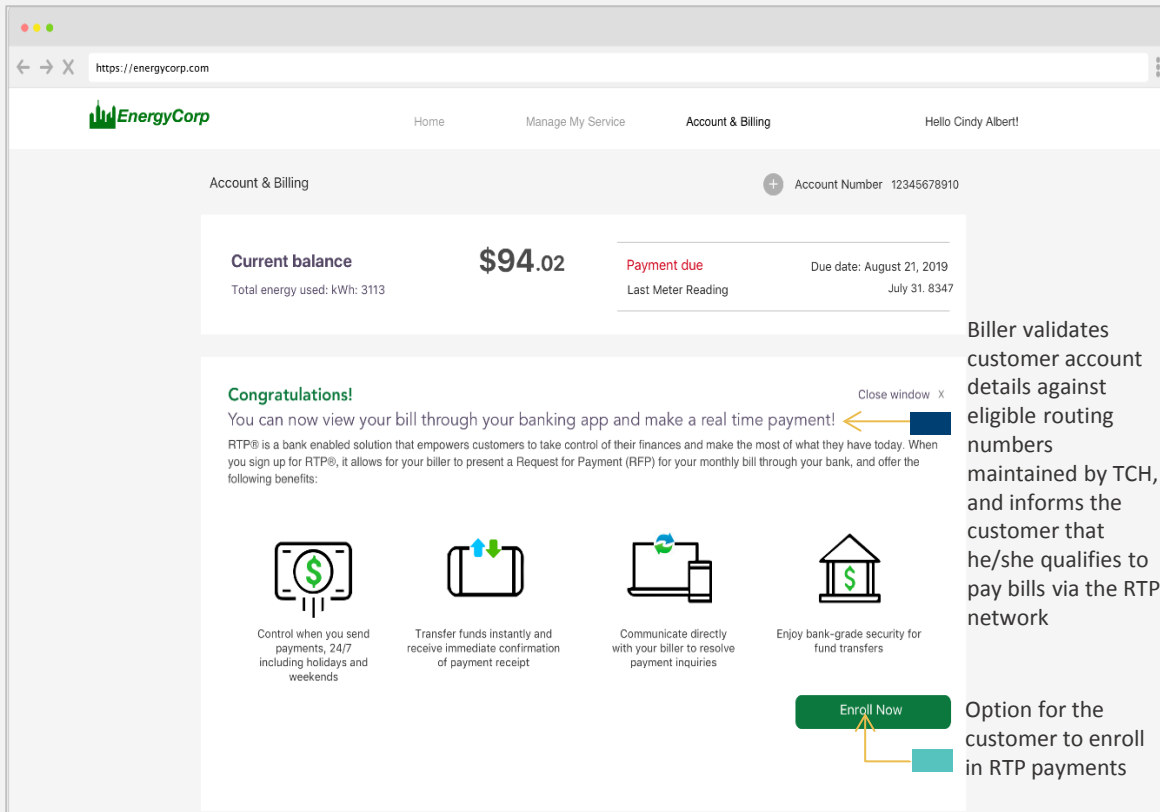


Notification to
inform the
customer that
he/she qualifies
for RTP payment

KEY

- = TCH / RTP payment enabled
- = Biller enabled

ILLUSTRATIVE



Account & Billing Account Number 12345678910

Current balance **\$94.02**

Total energy used: kWh: 3113

Payment due Due date: August 21, 2019

Last Meter Reading July 31, 8347

Congratulations! Close window x

You can now view your bill through your banking app and make a real time payment!

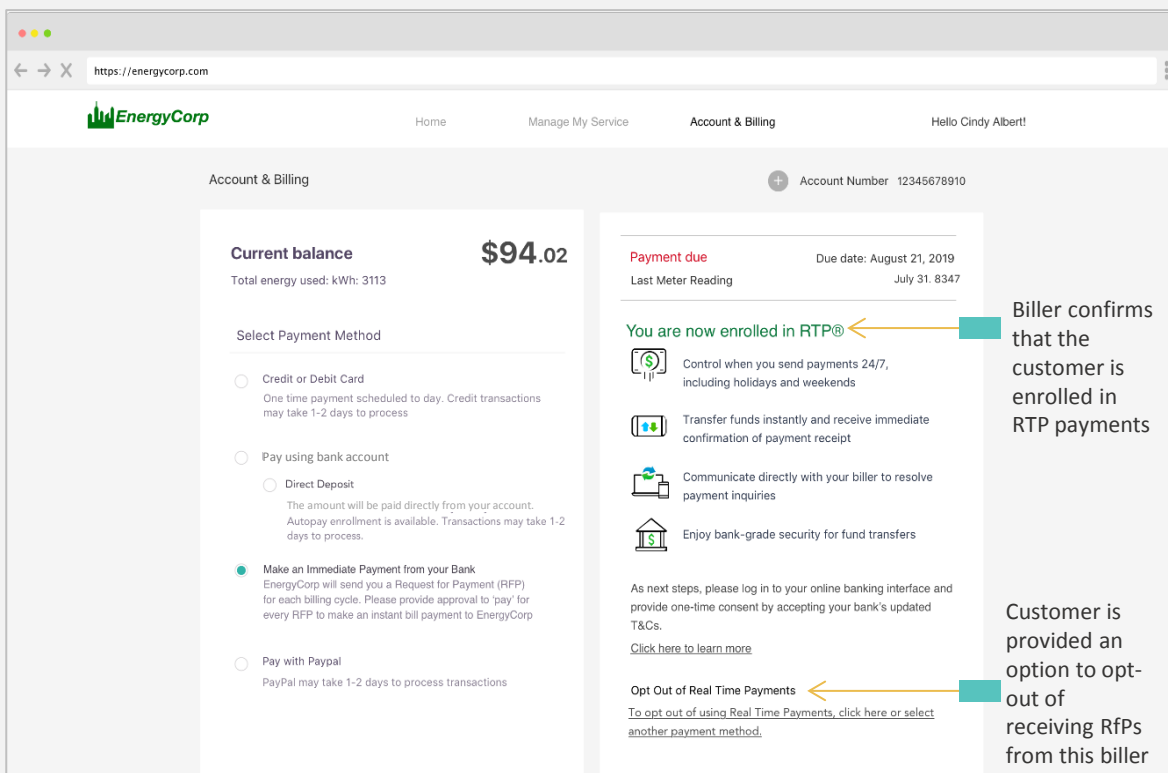
RTP® is a bank enabled solution that empowers customers to take control of their finances and make the most of what they have today. When you sign up for RTP®, it allows for your biller to present a Request for Payment (RFP) for your monthly bill through your bank, and offer the following benefits:

- Control when you send payments, 24/7 including holidays and weekends
- Transfer funds instantly and receive immediate confirmation of payment receipt
- Communicate directly with your biller to resolve payment inquiries
- Enjoy bank-grade security for fund transfers

Enroll Now

Biller validates customer account details against eligible routing numbers maintained by TCH, and informs the customer that he/she qualifies to pay bills via the RTP network

Option for the customer to enroll in RTP payments



Account & Billing Account Number 12345678910

Current balance **\$94.02**

Total energy used: kWh: 3113

Payment due Due date: August 21, 2019

Last Meter Reading July 31, 8347

Select Payment Method

- Credit or Debit Card
One time payment scheduled to day. Credit transactions may take 1-2 days to process
- Pay using bank account
 - Direct Deposit
The amount will be paid directly from your account. Autopay enrollment is available. Transactions may take 1-2 days to process.
 - Make an Immediate Payment from your Bank**
EnergyCorp will send you a Request for Payment (RFP) for each billing cycle. Please provide approval to 'pay' for every RFP to make an instant bill payment to EnergyCorp
- Pay with Paypal
PayPal may take 1-2 days to process transactions

You are now enrolled in RTP®

- Control when you send payments 24/7, including holidays and weekends
- Transfer funds instantly and receive immediate confirmation of payment receipt
- Communicate directly with your biller to resolve payment inquiries
- Enjoy bank-grade security for fund transfers

As next steps, please log in to your online banking interface and provide one-time consent by accepting your bank's updated T&Cs.
[Click here to learn more](#)

Opt Out of Real Time Payments

To opt out of using Real Time Payments, click here or select another payment method.

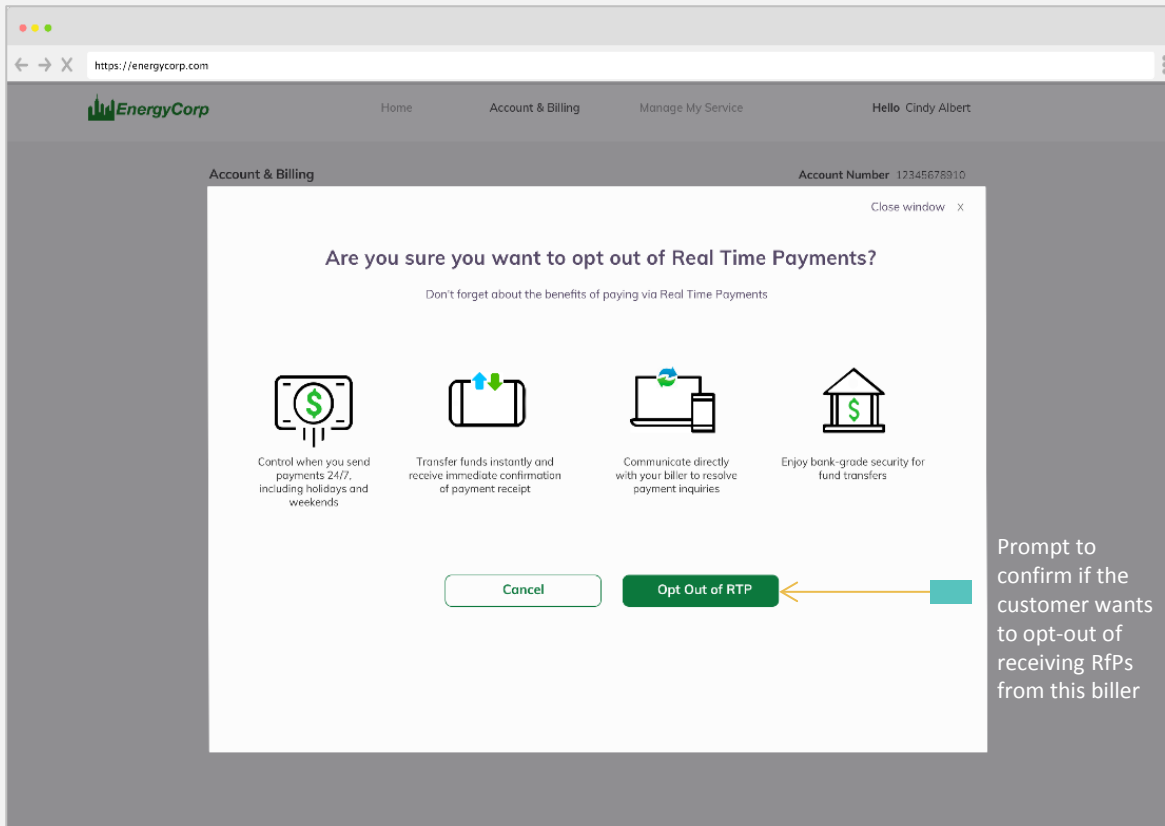
Biller confirms that the customer is enrolled in RTP payments

Customer is provided an option to opt-out of receiving RfPs from this biller

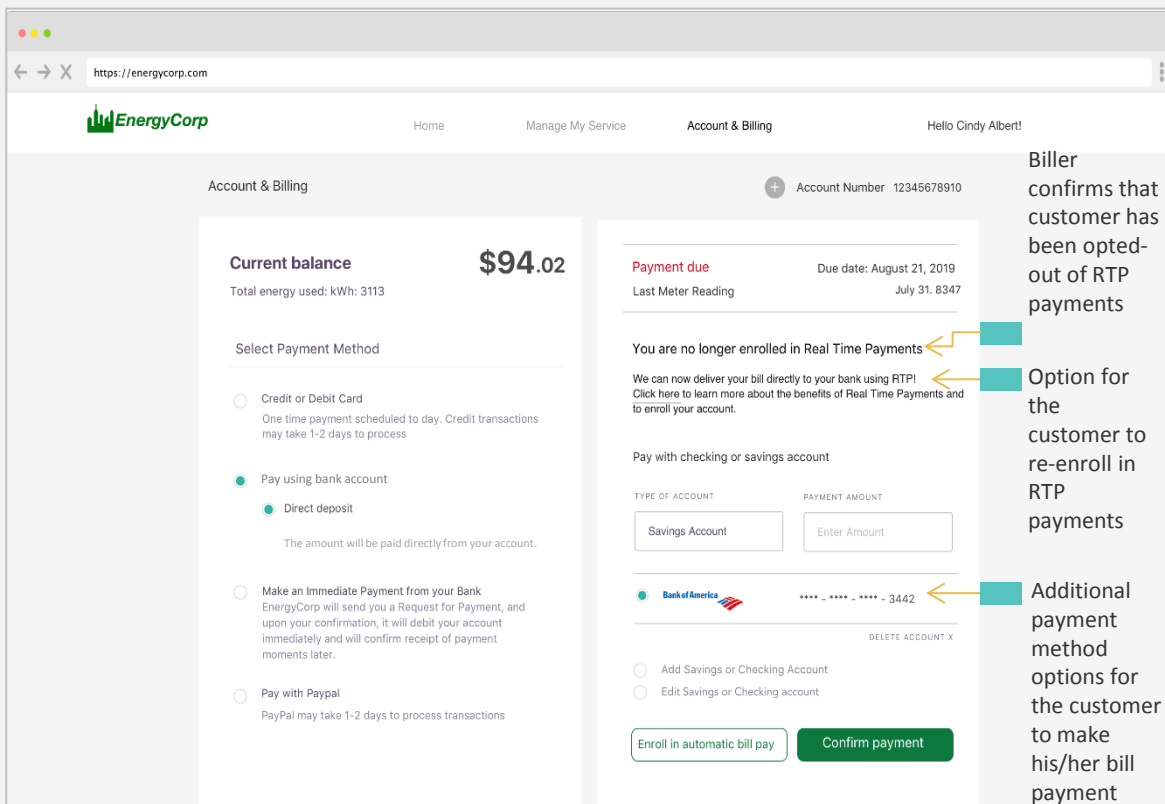
KEY

- = TCH / RTP payment enabled
- = Biller enabled

ILLUSTRATIVE



Prompt to confirm if the customer wants to opt-out of receiving RfPs from this biller



Biller confirms that customer has been opted-out of RTP payments

Option for the customer to re-enroll in RTP payments

Additional payment method options for the customer to make his/her bill payment

KEY

- = TCH / RTP payment enabled
- = Biller enabled

04: Supporting Documentation

Biller Guidelines for Bill Pay Use Case (1/3)

The guidelines below depict different scenarios under the **Bill Pay use case**. These guidelines are suggestive steps that billers may consider taking in different scenarios along the customer journey.

Category	Biller guidelines for MVP* State
Promise of the RTP Network	<ul style="list-style-type: none"> RTP payments enable billers to streamline their reconciliation process and transaction processing by using contextual data present against each payment RTP payments further aim to streamline operational processes with greater transparency of funds received with ability to eliminate misdirected and misapplied payments Streamlined processes enable billers to gain efficiencies and optimize capacity over a period of time with wider adoption
Onboarding Biller to RTP Functionality	<ul style="list-style-type: none"> Billers' bank should follow appropriate processes to enable RfP functionality for its biller customers. These services should be offered by banks based on an individual institution's implementation process that may include service level agreements, pricing structure, and other terms and conditions Billers may need to configure their billing and ERP systems to send out RfPs as a new option to accept payments Billers may have the option to generate files for processing RTP payments or may seek the help of their bank to create them
Customer Enrollment	<ul style="list-style-type: none"> Billers may wish to consider enrolling its customers via biller direct and educating them on the benefits of using RTP payments At the time of customer enrollment, biller may check with the customer to ensure RTP payments is the primary payment method to avoid any confusion <ul style="list-style-type: none"> For existing customers: A biller may choose to offer RTP payments as a payment method to selective customer groups based on internal parameters such as payment history, etc., and have a phased roll out for other groups over a period of time For new customers: A biller may choose to offer RTP payments as a payment method to all its new customers signing up for the first time For privacy purposes, the biller may wish to determine whether the customer is the primary bank account holder to which the RfP will be sent A biller may ask a few questions upfront to determine a customer's eligibility to receive an RfP (for e.g., ask the customer for his/her bank routing number, if the customer uses digital (web / mobile) banking, etc.). A biller is recommended to explain the reason of RfP ineligibility to the customer for a better customer experience (for e.g., 'Your bank is not yet eligible for RTP payments, please try again later')
Customer Eligibility	<ul style="list-style-type: none"> Billers will be able to issue RfPs to all their customers with banking relationships and with access to banking digital channels (like mobile banking app). A customer may be ineligible to receive an RfP, if (a) he/she is not digitally enabled, or (b) he/she has opted-out of receiving RfPs from a particular biller or all billers, or (c) his/her bank is not RTP payments-enabled Customer's bank should notify the biller's bank if an RfP is not delivered to the customer, and the biller's bank should communicate it to the biller (Biller may maintain this information as part of customer bill pay preferences and eligibility to use RTP payments) A biller may want to consider reaching out to its customers frequently (frequency to be determined by the biller) to check customer's eligibility – <ul style="list-style-type: none"> A customer's bank that was previously not receive enabled, may have become enabled recently. The biller should use the routing number details provided by the customer to check if the customer's bank is RTP-enabled and can receive RfPs

*MVP – Minimum Viable Product with bare minimum / limited functionalities; **Target State** – Future state product with additional functionalities

Biller Guidelines for Bill Pay Use Case (2/3)

Category	Biller guidelines for MVP* state
Customer Eligibility (Cont'd)	<ul style="list-style-type: none"> ❑ A customer may have changed his/her preferences about receiving RfPs from all billers or a particular biller ❑ A customer may have become digitally enabled ▪ A biller and customer's bank both should maintain customer preferences for RfPs (opt-in/ opt-out)
RfP Initiation	<ul style="list-style-type: none"> ▪ Frequency: Billers may send multiple RfPs to a customer during a billing cycle (In target state, billers have the ability to cancel an RfP in order to avoid it becoming stale). If a subsequent RfP for the same bill is issued, it would replace the prior one that was sent. No existing RfP would be deleted to ensure appropriate audit trail. Billers may use the RTP payment 'end-to-end identification' field to manage reconciliation and traceability. Billers would also have an option to send reminder notices for an open RfP ▪ Expiration: Upon expiry or decline by the customer, the status of an RfP should be updated accordingly and a response should be sent to the biller. Customers would not be permitted to pay against a declined or expired RfP. Biller may decide the appropriate follow up action for a declined or expired RfP (i.e. new RfP, contact customer) ▪ Payment amount: Billers may issue an RfP up to the maximum amount allowed by the network. Currently the maximum amount set by TCH is \$25,000 per RfP
Updated RfPs (sent by the biller)	<ul style="list-style-type: none"> ▪ A biller may consider providing the customer with an RfP with the most up-to-date billing information ▪ A biller may issue another RfP for the same invoice using the same 'end-to-end identification' field in an RfP message in case a customer has made a payment through another channel and / or the biller wants to adjust / update the balance due. ▪ The biller may consider following these communication guidelines while issuing an updated RfP to the customer: <ul style="list-style-type: none"> ❑ A biller is recommended to communicate to the customer (through their standard communication channels) about the reason for issuing an updated RfP and provide an applicable reference document / bill / invoice ❑ A biller may also use the free text field (140 characters) available to them to mention the reason for issuing an updated RfP (customer's bank is recommended to show these messages from the biller to their customers)
Joint Account Scenarios	<ul style="list-style-type: none"> ▪ Biller should direct an RfP to the customer's bank based on the bank routing number and DDA account number saved in the customer's payment preferences (whether the customer has a joint account or not) ▪ In case the bank account saved in the customer's payment preferences is not owned by the customer (e.g., bank account owned by a spouse), and the account holder opts-out of receiving RfPs, the biller may consider checking with the customer for alternate payment information
RfP Decline (by the customer)	<ul style="list-style-type: none"> ▪ Based on the decline reason (that the customer's bank routes to the biller through biller's bank), the biller may contact the customer to advise him/her on next steps, if necessary (e.g., if the customer has paid partially through another channel such as web, kiosk, IVR, the biller may consider sending an updated RfP for the remaining balance, etc.)

Biller Guidelines for Bill Pay Use Case (3/3)

Category	Biller guidelines for MVP* state
Duplicate Payments	<ul style="list-style-type: none"> Each RfP would contain a unique 'end-to-end identification' field which can help billers eliminate duplicate payments from its customers Billers may choose to use this field for invoice number or customer's service account number or any other unique reference number for easy reconciliation. Since funds are credited instantly, duplicate payments may be easily identified and addressed by billers
Partial/ Over Payments	<ul style="list-style-type: none"> A customer can make a full/partial, or max / min payment, depending on the functionality offered by the customer bank, and / or the biller's internal policies/business rules
Recurring Payments	<ul style="list-style-type: none"> Current RTP® Operating Rules require that customers initiate/approve each credit transfer, and do not permit automated payments in response to an RfP.
Biller Acknowledgement	<ul style="list-style-type: none"> Billers may wish to consider providing real time acknowledgement to their customers once a payment is received in real time (in addition to payment confirmation provided by the customer's bank). Billers are encouraged to post the payment against the customer's bill within 24 hours, and immediately if possible, and may send the acknowledgement at such time.
Payment Failure	<ul style="list-style-type: none"> A biller may follow their existing collections process if a payment has not been received by the due date.
Refunds	<ul style="list-style-type: none"> Billers may choose to continue existing business process and policies related to customer refunds RTP payments are irrevocable (cannot be reversed) and funds from accepted payments are immediately available. When appropriate, billers may issue refunds or return payments via RTP credit push capability (and use existing methods for refunds if they are not RTP payment-enabled)

Category	Biller guidelines for Target* state
Updated RfPs (sent by the biller)	<ul style="list-style-type: none"> Biller should be able to cancel the previously issued RfP and send another RfP with required adjustments
Joint Account Scenarios	<ul style="list-style-type: none"> Biller may direct the RfP based on customer directory maintained by Zelle (using an alias)
Partial/ Over Payments	<ul style="list-style-type: none"> A customer may choose to make a partial payment or over pay against an RfP (there are no restrictions on the amount that a customer can pay as long as its less than \$25,000). For RfPs with amount due greater than \$25,000, a customer can make multiple payments as long as the payment contains the Instruction ID of the original RfP.

Biller Checklist for Implementing RTP Payments



Biller checklist for developing RTP capability readiness

- Have you gained an understanding of financial implications of RTP payments on your business and systems?
- Have you studied the impact of RTP technology infusion on business processes and current IT infrastructure?
- Have you conducted ideation sessions with your business stakeholders and product leads to build a strong business case for RTP payments?
- Have you identified the right bank partner and started working with them to chart out a roadmap to transition to a new payment process that may involve internal and cross-departmental participation support?
- Have you gained an understanding of the impact of RTP payments on current payment processes, both internal processes and external functions?
- Have you allocated dedicated IT resources to accept, and update / post real-time payments to your internal accounting systems?
- Have you prepared a plan to consolidate payment systems?
- Have you studied the requirement of additional cost involved in remapping internal workflows and hiring additional staff?
- Have you trained your employees to ensure 365x24x7 customer support?
- Have you identified necessary updates to current processes to ensure consistent customer experience across channels?
- Have you collaborated with your bank to understand implications of RTP payments on customer data and set up additional security controls?
- Have you worked with your bank to enhance real-time monitoring and alerting capabilities for your business?
- Have you identified the target customer segment for the initial rollout of RTP payments?
- Have you aligned the core competencies of the RTP network with your customer segment needs?
- Have you signed up for the RTP Bill Pay Pilot through your bank?



Tips/Fact Check

As a biller, working with your bank is essential in building RTP capabilities. Refer to the section on “Guidelines for working with the biller’s bank” to identify drivers that a biller may consider while preparing for RTP payments.

Frequently Asked Questions (1/3)



1	What is the RTP network?
It's a new payments network launched by The Clearing House that enables consumers, businesses, and governments to immediately send and receive funds 24x7x365.	
2	Are RTP payments and Same-day ACH the same?
Same day ACH is faster than 'traditional' (i.e., next day) ACH, but it's still not real time. The payments are batch-processed during the same day through improved ACH settlement time. However, the RTP network processes payments within a few seconds / in real time.	
3	Is the RTP network the same as Zelle?
Zelle is a payment service that allows users to initiate a payment using the recipient's alias (e.g., phone number, etc.). Zelle currently uses a delayed settlement model that relies on the ACH network. In contrast, the RTP network is a clearing and settlement platform that clears and settles payments immediately, and provides recipients with immediate funds availability.	
4	How do I set up RTP payments for bill pay?
Customers should contact their banks to check if they are eligible to make real-time payments, and if their bank is RTP-payment enabled. If those conditions are met, customers may opt-in for RTP payments (and receipt of RfPs) by selecting the "opt-in" option on their biller website. Customers should be able to make RTP payments going forward.	
5	Can I set up RTP payment for autopay with my biller?
RTP® Operating Rules require that customers initiate/approve each credit transfer, and do not permit automated payments in response to an RfP.	
6	Can I make an RTP payment to my biller without receiving an RfP?
Yes, customers may be able to make an RTP payment to a bill without receiving an RfP, (e.g., if the customer's bank has an existing relationship with the biller, or has access to a biller directory).	
7	What happens if I decline an RfP?
In case a customer chooses to decline an RfP, the biller may contact the customer to advise on the next steps, if necessary.	
8	Am I charged any fee for paying my bills using the RTP network?
It is up to the discretion of the customer's bank to determine the price it charges customers to make payments through the RTP network.	
9	Can I set up a future-dated RTP payments?
Customers may be able to set up future dated payments if their bank supports and offers this functionality.	
10	Can I pay a partial amount for my bill?
Customers may set up partial payments if the biller business model and banks support and offer this functionality.	

Frequently Asked Questions (2/3)



11	What happens if I do not recognize the RfP I've received?
<p>The RTP Rules do not permit Participants to send RfPs on behalf of billers that are unknown to a customer. However, in the event that the customer does not recognize an RfP, he / she is not obligated to take any action on the same. He/ she can also report the RfP to the biller. Customers can also inform their bank that they have elected not to receive RfPs from a particular biller (or opt out of receiving RfPs entirely).</p>	
12	How do I know if the biller has received my payment?
<p>Customers will receive a real-time acknowledgement from the biller once the payment made.</p>	
13	What happens to my funds if the biller does not accept my payment?
<p>In cases where the payment is rejected, the customer will be prompted with an appropriate message. The customer may then contact the biller/bank based on the message received.</p>	
14	Do I get refunds in real time (in case of duplicate payments, etc.)?
<p>A customer may contact the biller to seek a refund. In case a duplicate payment is made, it may be reflected in the form of a credit payment on customer's account, or be returned to the customer (depending upon the biller's business practices).</p>	
15	How do I opt-out of receiving RfPs from my biller?
<p>Customers can opt-out of receiving RfPs by choosing the "opt-out" option on the biller website. Customers can also inform their bank that they have elected not to receive RfPs from a particular biller (or opt out of receiving RfPs entirely). For example, banks could allow customers to opt-out* of receiving RfPs through a bank's bill pay interface. The customer's bank must notify the biller's bank (via RTP message) and the biller bank should provide this information to the biller. Billers are encouraged to retain this information as part of customer's bill pay preferences.</p>	
16	What types of transactions are eligible for RTP payments?
<p>Currently, credit transactions with a value up to \$25,000 per transaction are eligible.</p>	

*In Target State - Future state product with additional functionalities

Frequently Asked Questions (3/3)



17 | How much will RTP payments cost billers?

Banks will determine the pricing for their customer service offerings.

18 | How may real-time payments impact the use of other existing payment methods?

With faster payments gaining traction, certain transactions made via checks and non-instant credit transfers (e.g., ACH), as well as last minute debits, may move towards real-time payments in the long run due to the inherent benefits of real-time payments over these other methods. However, the impact on other payment types may be less significant in the near future.

19 | How is FedNow (a real-time payment service announced by the Fed) expected to impact the RTP network?

The RTP network will continue to deliver benefits to depository institutions and their customers. While TCH will stay abreast of the Fed's efforts to develop its own real-time payments system, which may become available in 2023 or 2024, TCH's focus will remain on ensuring that the RTP network reaches all depository institutions.

20 | What is the roadmap for the adoption of the RTP network?

The adoption is likely to begin with banks and billers using customer account numbers (bank routing number and DDA information) as a means to route invoice information via RfPs and seek a real-time payment. Over time, banks may support alias based RfPs to request RTP payments.

Quick Links



Helpful Links

[RTP® Network Use Cases for Many Business Needs](#)

[RTP® Library: Messaging Specs, Rules, Requirements, and More](#)

[RTP® Messaging Specs](#)

[Business Principles for the RTP® Network](#)

[RTP® Operating Rules](#)

[RTP® Participation Rules](#)

[RTP® Payments: What you need to know.](#)

Target State Prototype Link

[Customer making a successful payment](#)

MVP Prototype Links

Customer enrolment:

- [Customer enrolling in a payment method for the first time, qualifying for RTP® payment](#)
- [Customer with a saved payment method \(for ACH debit\) qualifying for RTP® payment](#)
- [Customer enrolling in a payment method for the first time, not qualifying for RTP® payment](#)

[Customer making a successful payment](#)

[Customer declining a Request for Payment](#)

[Payment getting rejected](#)

05: Glossary of Terms (1/2)

Acronym	Definition	Description
ACH	Automated Clearing House	Reference to various types of electronic transactions, such as payroll direct deposit, automatic insurance premium deductions, loan payments, etc.
API	Application Programming Interface	Software intermediary that allows two applications to communicate with each other
Bill Presentment	Electronic Bill Presentment	Bill presentment is an online system that allows electronic invoices to be created, processed and paid over the internet or a mobile app
B2B	Business to Business	Payment transfers between two businesses
B2C	Business to Consumer	Payment transfers made by a business to its consumer
C2B	Consumer to Business	Payment transfers made by a consumer to a business
DDA	Demand Deposit Account	A transactional deposit account held at a Financial Services Organization. A DDA is designed to provide for frequent access to a customer's funds that are available for immediate withdrawal by way of different channels (for example, checks, ATM withdrawals, debit cards, etc.) DDAs include, but are not limited to, checking accounts, savings accounts, money market accounts, and any account in which funds are available for immediate withdrawal
ERP	Enterprise Resource Planning	Business process management software that allows an organization to use a system of integrated applications to manage the business and automate many back office functions related to technology, services and human resources
FI	Financial Institution	Financial Institution
ISO 20022	ISO 20022	International standard that defines the ISO platform for electronic data interchange in the development of financial message standards. It describes a metadata repository containing descriptions of messages, business processes, and a maintenance process for the repository content
MVP	Minimum Viable Product	A product developed with limited features for early adopters. The final, complete set of features (Target State) is only designed and developed after considering feedback from the product's initial users
ODFI	Originating Depository Financial Institution	A participating depository financial institution that is responsible for the origination of ACH transactions

05: Glossary of Terms (2/2)

Acronym	Definition	Description
P2P Payments	Peer-to-Peer payments	Electronic money payments typically made through an intermediary
Receiving FI	Consumer Bank	Consumer Bank and Receiving FI are used interchangeably
RfP	Request for Payment	A payment-related message (ISO20022 pain.013) that is sent by the biller to the customer through their respective financial institutions, to request an RTP payment in response
RTP® network	Network name (not an acronym)	Network for real-time payments hosted by TCH
Sending FI	Biller Bank	Biller Bank and Sending FI are used interchangeably
TCH	The Clearing House	A U.S based company for a payment system infrastructure that enables payment settlements in real time

Points of Contact

06: Contact Us



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Appendix

Appendix

Why Should Billers Know About RTP Payments? (1/4)

Challenges with current payment methods

A. High Bill Processing Costs

- Higher costs of printing and mailing paper bills
- Costs of processing paper checks and accounting for lost checks in transit
- Additional resource requirements for managing bill payment centers



1 in 4 checking account owners/bill payers still receive both online and paper statements each month which is redundant and costly¹

5 x Times more expensive to receive and process a paper check than ACH²

\$2.2 B Expected savings as a result of moving from paper to online statements by 2020¹

Costs incurred by billers on different channels

Channel	Bill Presentment Cost	Customer Contact Center Costs	Payment Service Provider Fee
Biller Direct	<ul style="list-style-type: none"> ▪ \$0.53 per paper bill³ ▪ \$0.10 per electronic bill³ ▪ \$1.00 per million mobile push notifications⁴ 	<ul style="list-style-type: none"> ▪ \$3.38 per call for a 6 min call on average⁵ 	<ul style="list-style-type: none"> ▪ 2.9% + \$0.3% per txn⁶ (cards)
Bill Pay			<ul style="list-style-type: none"> ▪ Merchant discount rate is passed on by the bank to the biller
3 rd Party Aggregator			NA

Bill presentment cost becomes a large component when billers send paper bills – 72% of bills are paid through online channels, but only 39% of statements are delivered digitally. This cost can be reduced by 65-85% by using electronic bills⁷

B. Ineffective Funds Management

- Expense Management and reconciliation of money from different channels is tedious
- Lack of visibility on bill payments leads to the need for higher cash reserves



C. Ineffective Messaging

- Most billers currently use mass messaging for their customers which gets limited attention
- There is a need for customized, contextual messaging based on customer spend pattern, etc.



D. High Contact Center Costs

- Most calls to the contact center are made to enquire about payments. Top 5 calls to a contact center comprise of issues such as balance due, disputing a specific charge, unbilled charges, payment due date and billed charges. This comprises a significant component of the overall biller cost



Source: 1. Javelin, 2. Payments Cost Benchmarking Survey, 3. DNI Corp cost estimates-used as a proxy, 4. Amazon SNS, 5. ACI Worldwide Report:Bill Pay's New Manifesto- Omni - Channel Strategy Driving Interactive Customer Engagement, 6. Paypal fee, 7. Javelin

Why Should Billers Know About RTP Payments? (2/4)

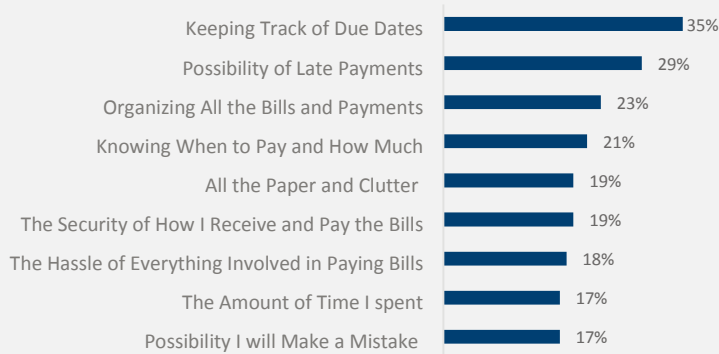
Customers today are primarily concerned about keeping track of due dates and the possibility of late payments.

According to a 2016 Fiserv study¹:

- 35% of customers pay their bills after a due date and 65% have had to pay a late fee
- 70% of customers expect same day credit for bill payments. This figure rises to 90% when considering those who expect credit no later than the next day

The latest Fiserv study from 2017 indicates that 76% customers (85% Gen Xers and 93% millennials) expect real-time payment delivery in their mobile banking experience²

Customer pain points associated with receiving and paying bills³ (Percentage distribution of billers)



Expectations of Faster Processing on the Rise¹

When Credit for Bill Payment is Expected	In 2016	Change from 2014
Instantly	27%	59%
Same Day	43%	54%
Next Day	20%	-31%
2-3 Days	9%	-64%

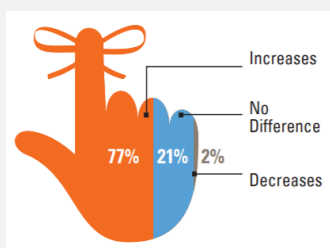
Customers' primary motivation to prioritize bills is to avoid late fees¹

- Customers' often need to prioritize their bill payments. The factors that influence their decisions include the need to avoid late fees, service shutoff and credit score downgrade
- Credit-card companies collected \$11.4 billion in penalty fees in 2015 which represented ~95% of all penalty fees⁴

To boost customer satisfaction, bill pay services should be designed to reduce late payments and associated fees. Billers are increasingly looking at modernizing their bill pay capabilities by focusing on greater use of digital channels, and better integration and use of real-time capabilities.

Bill Pay Reminders Increase Satisfaction³

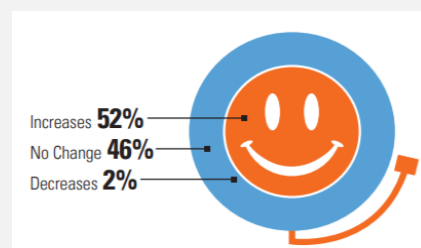
Q: If a biller or bank sends you a reminder to pay a bill to prevent late payment and possibly incurring a fee, what impact would that have on your satisfaction with that biller or bank?



Customer responses

Expedited Payments Via Online Banking Enhance Satisfaction With Billers³

Q: If a biller allowed emergency bill payments to be made through your bank's or credit union's online bill pay service, what impact would that have on your satisfaction with the biller?



Customer responses

Source: : 1. Fiserv; 2. 2017 Fiserv Consumer Payments Study; 3. Fiserv; 4. Wall Street Journal

Why Should Billers Know About RTP Payments? (3/4)

RTP payments can address challenges that billers' customers face...

"Monthly bills feel like asteroids coming at me from all directions, it's terrifying!"

"I like to pay everything on time but it is just impossible"

"I wish there could be just one way to see all of my bills"

"Pending status is a big source of stress so being able to monitor inflows and outflows and receiving alerts is valuable"

"My biggest challenge is remembering all of the different bills, especially when the cards and bills are not in front of me"

"I would want it to get rid of all of the paper statement clutter in my apartment"

"I try to keep notes, I try to think about it, but it gets tough. I need help streamlining the process and making the right payment decisions"

....As well as those faced by billers today

40% of merchants think having to wait to receive checks from customers significantly or very significantly impacts payment times for their business





63% of merchants report that their business maintains a cash contingency to cover for the time it takes to receive payments

31% of merchants report that their business would be willing to pay some type of fee to ensure they receive all payments immediately

35% of merchants think the time it takes for consumers to write and send a check significantly or very significantly impacts payment times for their business

30% of merchants think needing to align incoming electronic payments with outstanding customer bills has a significant or very significant impact on their business' operations

Benefits of RTP capabilities to billers

 Better Cash Flow Predictability	 Easy Reconciliation	 Security	 Direct Line of Communication
Provides billers with funds in real time, and visibility into future revenue inflows for better cash management	Allows billers to easily match customer names with transactions and credit statements	Provides a foundation for bank grade security (billers may chalk out a plan for security controls by working with their banking partner)	Easy communication between biller and the customer to solve queries and ensure a good experience

Why Should Billers Know About RTP Payments? (4/4)

Impact of RTP Payments on different cost/benefit elements associated with traditional payment methods				
Cost/Benefit category	Cost/Benefit elements	Card	ACH*	Check
Time costs	Reconciliation time for the payments received/sent based on the accounting information	Positive	Positive	Positive
	Travel time to move from place of residence to designated point in order to initiate/receive a payment transaction	Neutral	Neutral	Positive
	Waiting time for payee to initiate a payment after reaching the designated point	Neutral	Neutral	Positive
	Transaction time (depositing) to deposit the payer's check to initiate the transaction	Neutral	Neutral	Positive
	Transaction time for the relevant application to successfully initiate the transaction	Positive	Positive	Positive
Logistic costs	Travel costs spent in the process of accessing a payment instrument and receiving a payment transaction	Neutral	Neutral	Positive
Damage costs	Error costs associated with imbalances or loss of checks/vouchers	Positive	Positive	Positive
	Security costs associated with unauthorized debits	Positive	Positive	Positive
	Insurance costs/premium paid against the losses incurred	Neutral	Neutral	Neutral
Infrastructure costs	Maintenance costs involved in keeping the payment infrastructure functioning	Neutral	Neutral	Neutral
	Depreciation costs for the payment infrastructure	Neutral	Neutral	Neutral
Cost of funds	Float costs associated with unavailability of funds at the payee/payer between initiation and receipt of payment transaction	Positive	Positive	Positive
Production costs	Production costs associated with printed physical forms (debit/credit transfer forms, checks, etc.)	Neutral	Positive	Positive

Note:

- Positive impact of real-time payments (represents increase in efficiency or decrease in cost as an impact of real-time payments)
- Neutral impact of real-time payments (represents no impact of real-time payments)

*Since the RTP network is credit push only, it avoids any overdraft fees or other costs associated with ACH returns

How are RTP Payments Different?

CURRENT PAYMENT METHODS

RTP PAYMENTS

DELAYED AVAILABILITY – Due to unpredictable clearing times, the sender does not have visibility as to when the transfer would be successful or funds available to the receiver for use.

01

Immediate Availability and Notification

With TCH's RTP network, receivers have immediate funds availability. Related status notifications are sent to senders (that a transfer was successful) and recipients (that funds are available).

PAYMENT REVERSAL – Payments may be reversed under certain circumstances and within a predefined period of time.

02

Payment Certainty

Payments cannot be revoked or recalled once authorized by a sender and submitted to the RTP network.

CREDIT PUSH AND DEBIT PULL– ACH supports credit push as well as debit pull transactions.

03

Credit Push Only

TCH's RTP network only supports credit push transactions. The payee may send a Request for Payment message but will not be able to pull funds directly from the payer's account.

LIMITED MESSAGING OPTIONS – Remittance information must be included within the payment message itself.

04

Flexible Messaging Options

TCH's RTP network provides flexible, robust messaging components with multiple options for enclosing remittance information. Options include using the payment message, sending a non-payment message, or referencing an external remittance source.




POTENTIAL MISUSE OF BILLING– False billing occurs when customers are requested to pay fake invoices for goods or services that the customer did not order / use

05

Controls to Mitigate Billing Misuse

The RTP® Operating Rules include a warranty that RfPs are initiated for a "legitimate purpose" (as defined in the RTP® Rules) and are not fraudulent, abusive or unlawful. This and other RTP rules regarding RfPs (e.g., regarding required due diligence) are intended to prevent misuse of RfPs.

Benefits of RTP Capabilities For Specific Functions in a Biller Organization

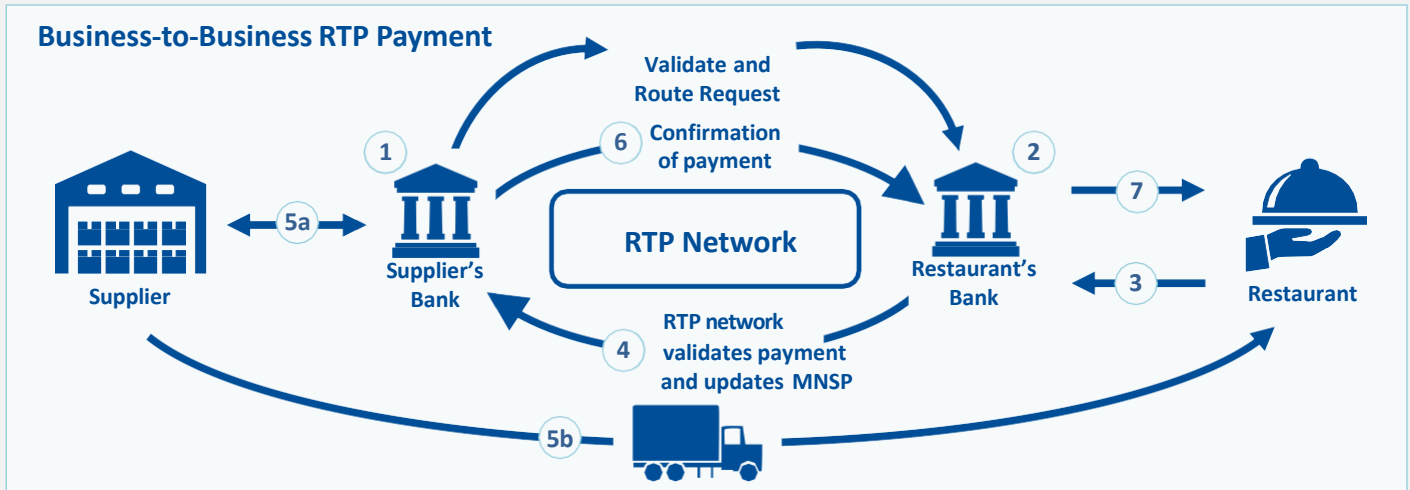
Function	Benefit	Benefit Realization Timeline*
 Billing and Invoice Management	Efficiency in invoicing and billing through reduction in bill presentment costs due to savings on physical bill generation	S M L ▲ (between M and L)
	Reduction in contact center costs due to reduction in payments enquiries (receipt of payments, duplicate payments, misdirected payments, misapplied payments)	S M L ▲ (between S and M)
 Customer Management	Better responsiveness to customer needs and immediate redressal of complaints (Biller communication through RFI capability)	S M L ▲ (between M and L)
	Optimized working capital management through instant funds availability	S M L ▲ (between M and L)
 Finance and Accounting	Automated reconciliation through instant processing and settlement of payments, and reduced use of checks that require manual reconciliation	S M L ▲ (between M and L)
	Improved liquidity management through reduction in account receivables by instant settlement and payment posting	S M L ▲ (between S and M)
	Safer and secure channels for communication and payments by utilizing the RTP network as the base for secure communication with the customer (via the bank), with no risk to bill payer of unauthorized debits. Billers can also build tools such as real-time analytics on top of the RTP network by chalking out a plan with their banking partner.	S M L ▲ (between M and L)

S: Short term; M: Medium term; L: Long term

*The timeline depicted is based on qualitative research and is indicative only. The measure of benefit and timeline will vary by organization size, business, customer base, payments volume, etc.

Sample B2B RTP Payment Scenario

Immediate payment systems are particularly well-suited to provide value beyond the inherent benefit of fast money movement. A fundamental feature of the RTP network is real-time communication among senders, receivers, and their FIs.



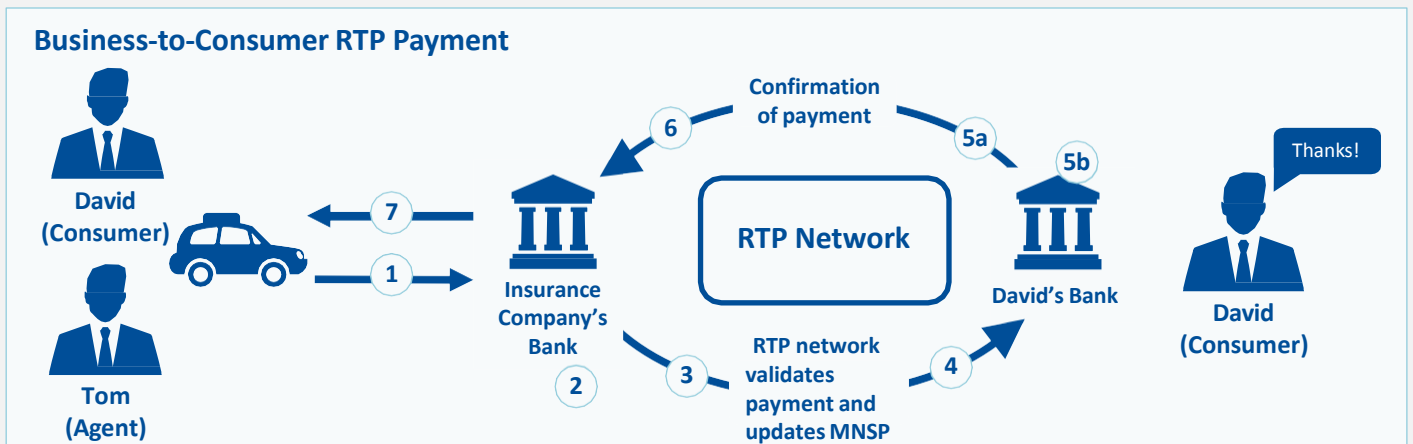
Use case scenario: A single business-to-business (B2B) transaction between a restaurant and its supplier illustrates the value of extensive immediate messaging. In this scenario, a restaurant orders produce for immediate delivery from a supplier that does not extend trade credit. The restaurant needs the produce for tonight's dinner service and the supplier needs to be paid before shipping the goods. Using the immediate messaging capabilities of a fully-featured RTP network, the supplier can request and receive payment nearly instantly.

1. The supplier reviews an order received from a restaurant and sends a "Request for Payment" (RfP) through their bank. The supplier's bank sends the RfP message to the RTP network. Sending the request through a secure, trusted channel reduces fraud risk associated with an e-mail invoice.
2. The RTP network validates the request and routes it to the restaurant's bank, which then notifies the restaurant.
3. The restaurant receives the RfP that contains a "Pay Now" button. Upon selecting the "Pay Now" button, a pre-populated payment message that includes all pertinent payment data (e.g., remittance information, payment amount, etc.) is presented to the restaurant so they can make the payment to their supplier quickly and easily.
4. The restaurant's bank submits the transaction to the RTP network that validates the transaction details and updates the multilateral net settlement position (MNSP) for the transaction for the debtor and creditor institutions in the amount of the transaction. The payment message is then sent to the supplier's bank that then confirms the account number is valid and accepts the payment.
- 5.a. The supplier's bank notifies the supplier of payment. The supplier sends acknowledgement of payment receipt to the restaurant, confirming the produce is on the way.
- 5.b. The supplier loads produce for delivery to the restaurant, confident that payment has been made.
6. The supplier's bank sends a message to the RTP network with acceptance of the payment and receipt acknowledgement from the supplier.
7. The restaurant's bank notifies the restaurant, confirming that the produce is on the way through a reliable, trusted channel, assuring the restaurant that diners will enjoy dishes made with fresh ingredients that evening.

Note: The exchange of information between biller and customer goes beyond the remittance detail that typically accompanies B2B electronic payments. Remittance data is essential and allows the biller to apply payment to the correct invoice, account for any differences, and reconcile those differences. In this immediate payment example, the payment request, notification message, and confirmation message all provide additional value for a time-sensitive transaction.

Sample B2C RTP Payment Scenario

A business-to-consumer (B2C) transaction demonstrates that RTP network offers value beyond P2P transactions. One example is the case of an insurance claims adjuster now having the ability to meet with a customer shortly after an accident or claim, assess value of damages, and provide funds immediately, thereby relieving the customer of worry in an already stressful situation.



Use case scenario: In this business-to-consumer (B2C) transaction, David has damages to his car from an accident. He calls his insurance company, which sends its local adjuster, Tom, to meet with David and view the damages. Tom inspects the claim, determines the appropriate settlement amount, and approves it remotely. Tom's insurance company immediately sends David the settlement amount.

1. Tom instructs the insurance company's bank to pay David the approved settlement amount. In addition to David's routing and account number used to address the payment, the payment instruction also includes claim information that both the insurance company and David can access. (Extensive claim information could be included in a remittance advice message or through a reference to an external source).
2. The insurance company's bank uses appropriate customer authentication and payment verification processes to verify Tom has authority to initiate payments from this account. They will also ensure that "good funds" are available.
3. The insurance company's bank submits the transaction to the RTP network.
4. The RTP network validates the transaction details and the payment instruction and updates the multilateral net settlement position (MNSP). Associated claim information is then sent to David's bank.
- 5.a. Once David's bank has received the transaction, it checks that the account number is valid and then sends a message back to the RTP network that it has accepted (or rejected) the payment.
- 5.b. If the payment is accepted, David's bank simultaneously credits his account with the claim amount sent by the insurance company so he can have immediate access to the funds.
6. The RTP network sends a message to the insurance company's bank to let them know that the transaction has been made successfully. The insurance company's bank marks the transaction as complete.
7. The insurance company's bank confirms the status of the payment and provides transaction details to the insurance company. Each sending bank will decide how their customers will be notified of transaction status. In all cases, once the payment has been made, a confirmation message will always be sent between banks.

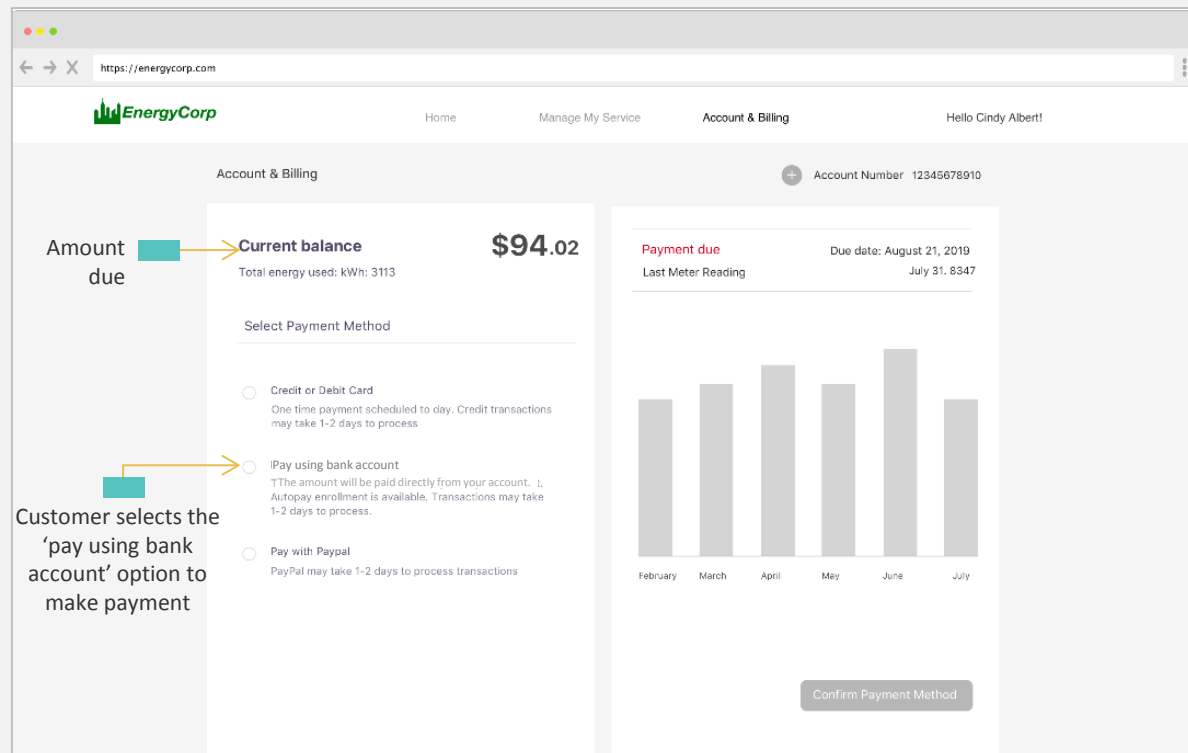
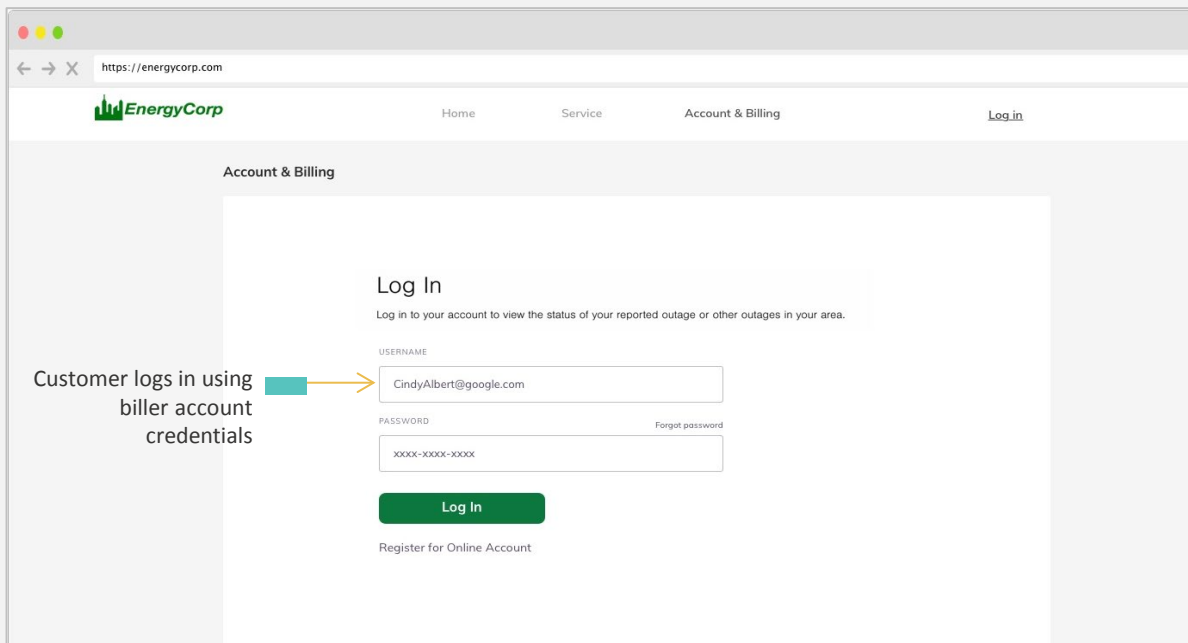
Note: The exchange of information between biller and customer goes beyond the remittance detail that typically accompanies B2C electronic payments. Remittance data is essential and allows the biller to apply payment to the correct invoice, account for any differences, and reconcile those differences. In this immediate payment example, the payment request, notification message, and confirmation message all provide additional value for a time-sensitive transaction.

Customer Enrollment on Biller Interface

Customer Enrollment – Sample Prototype Screens

Use Case – Customer enrolling in a payment method for the first time, and qualifying for RTP payment

ILLUSTRATIVE



KEY

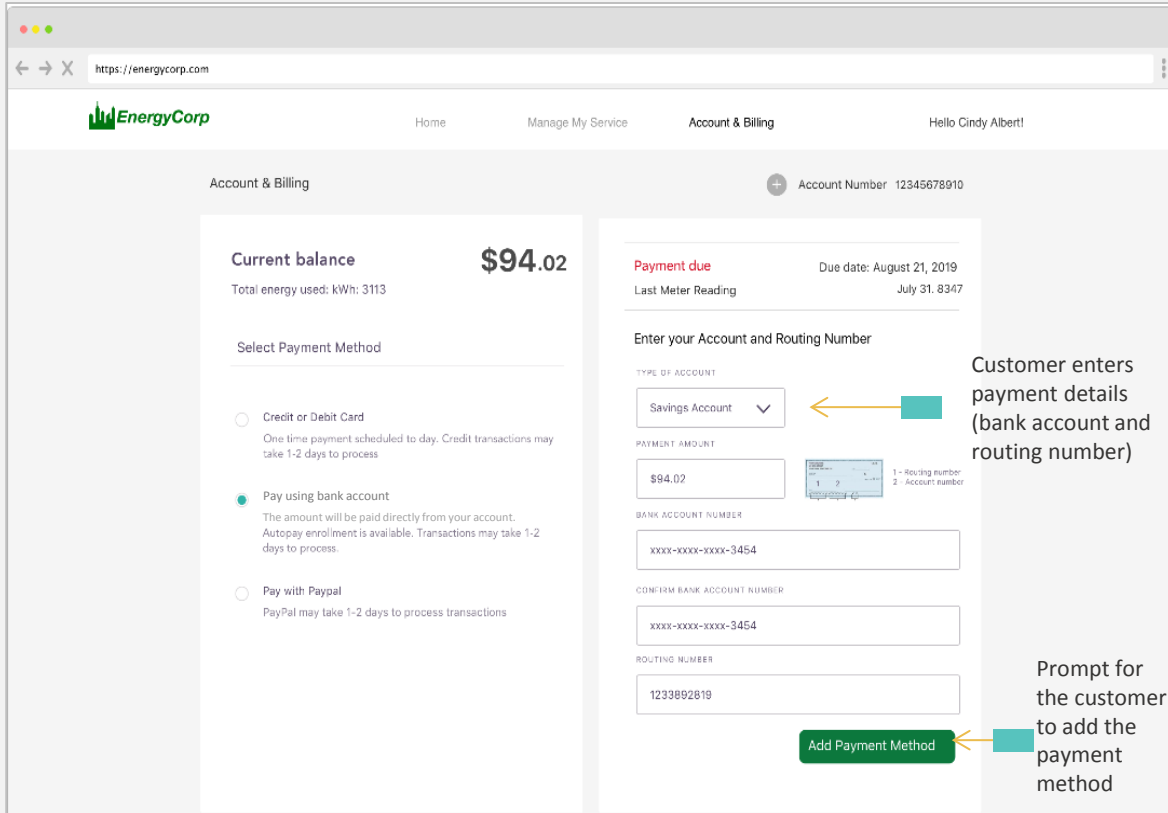
- = TCH / RTP payment enabled
- = Biller enabled

Appendix

Why should billers know about RTP payments?

- How are RTP payments different?
- Benefits of RTP Capabilities For Specific Functions in a Biller Organization
- Sample RTP payment scenarios
- Customer enrollment on biller interface

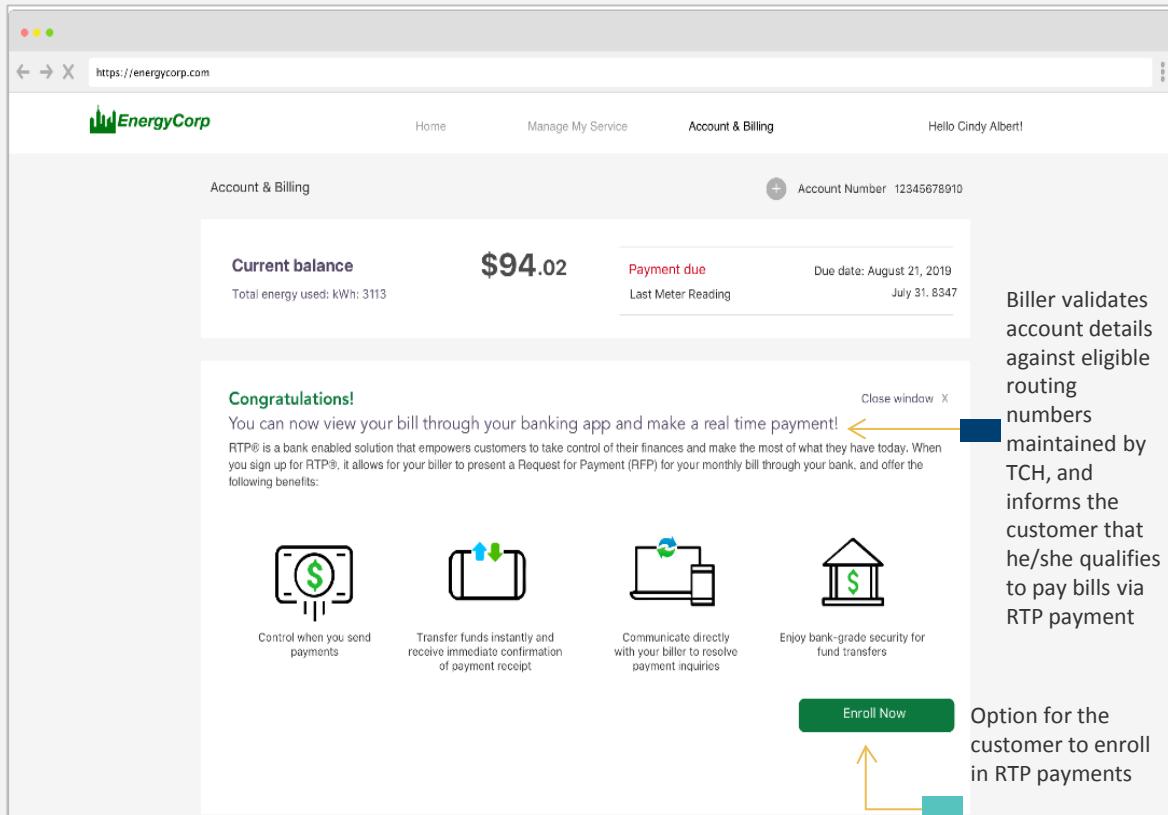
ILLUSTRATIVE



The screenshot shows the 'Account & Billing' page for EnergyCorp. The current balance is \$94.02. The payment due date is August 21, 2019. The user is prompted to 'Enter your Account and Routing Number'. The form includes fields for 'TYPE OF ACCOUNT' (Savings Account), 'PAYMENT AMOUNT' (\$94.02), 'BANK ACCOUNT NUMBER' (XXXX-XXXX-XXXX-3454), 'CONFIRM BANK ACCOUNT NUMBER' (XXXX-XXXX-XXXX-3454), and 'ROUTING NUMBER' (1233892819). A green 'Add Payment Method' button is visible at the bottom right of the form.

Customer enters payment details (bank account and routing number)

Prompt for the customer to add the payment method





The screenshot shows the 'Congratulations!' message on the EnergyCorp website. The message states: 'You can now view your bill through your banking app and make a real time payment! RTP® is a bank enabled solution that empowers customers to take control of their finances and make the most of what they have today. When you sign up for RTP®, it allows for your biller to present a Request for Payment (RFP) for your monthly bill through your bank, and offer the following benefits:'. Below the message are four icons representing benefits: 'Control when you send payments', 'Transfer funds instantly and receive immediate confirmation of payment receipt', 'Communicate directly with your biller to resolve payment inquiries', and 'Enjoy bank-grade security for fund transfers'. A green 'Enroll Now' button is located at the bottom right of the message area.

Biller validates account details against eligible routing numbers maintained by TCH, and informs the customer that he/she qualifies to pay bills via RTP payment

Option for the customer to enroll in RTP payments

KEY

-  = TCH / RTP payment enabled
-  = Biller enabled

Why should billers know about RTP payments?

How are RTP payments different?

Benefits of RTP Capabilities For Specific Functions in a Biller Organization

Sample RTP payment scenarios

Customer enrollment on biller interface

ILLUSTRATIVE

The screenshot shows the EnergyCorp account interface. The current balance is \$94.02. Under 'Select Payment Method', there are several options: Credit or Debit Card, Pay using bank account, Direct deposit, Make an Immediate Payment from your Bank (RTP), and Pay with Paypal. The RTP option is selected. To the right, a confirmation message states 'You are now enrolled in RTP@' with a blue arrow pointing to the text. Below this, there are four benefits of RTP: 24/7 payment control, instant fund transfers, direct communication with the biller, and bank-grade security. A 'Payment due' section shows the due date as August 21, 2019. A note at the bottom says 'As next steps, please log in to your online banking interface and provide one-time consent by accepting your bank's updated T&Cs.' There is a link to 'Opt Out of Real Time Payments' and another link to 'To opt out of using Real Time Payments, click here or select another payment method.'

Option to use RTP payments to make a payment

Biller confirms that the customer is enrolled in RTP payments.

Customer is provided an option to opt-out of receiving RfPs from this biller

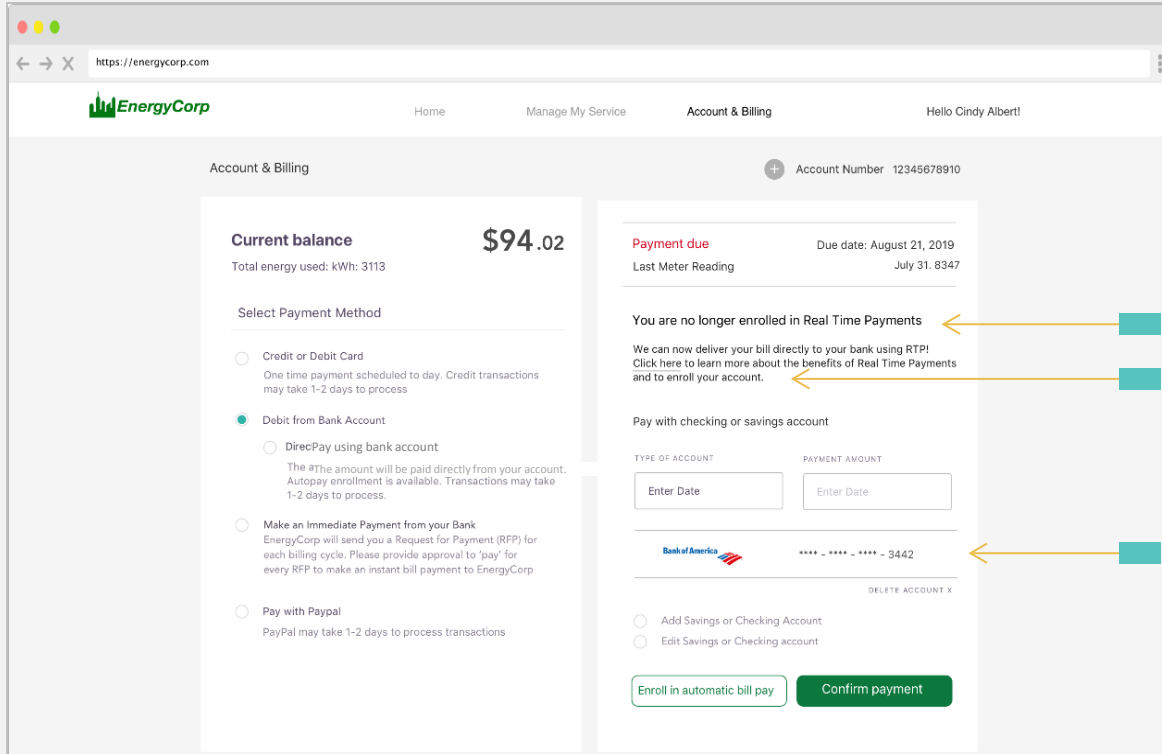
The screenshot shows a modal dialog box titled 'Are you sure you want to opt out of Real Time Payments?'. It includes a reminder: 'Don't forget about the benefits of paying via Real Time Payments'. Below this are four icons representing RTP benefits: 24/7 payment control, instant fund transfers, direct communication with the biller, and bank-grade security. At the bottom of the dialog are two buttons: 'Cancel' and 'Opt Out of RTP'. A blue arrow points to the 'Opt Out of RTP' button. A note on the right says 'Prompt to confirm if the customer wants to opt-out of receiving RfPs from this biller'.

Prompt to confirm if the customer wants to opt-out of receiving RfPs from this biller

KEY

- Blue square = TCH / RTP payment enabled
- Green square = Biller enabled

ILLUSTRATIVE



Billers confirm that the customer has been opted-out of RTP payments

Option for the customer to re-enroll in RTP payments

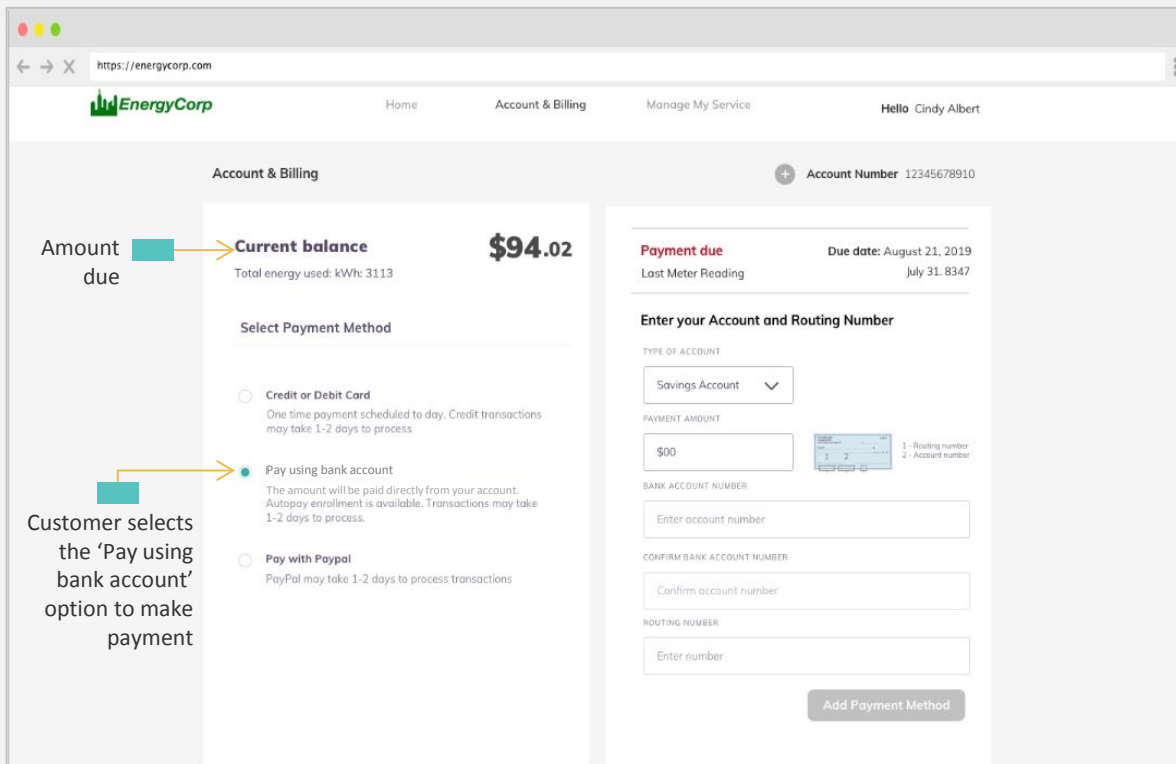
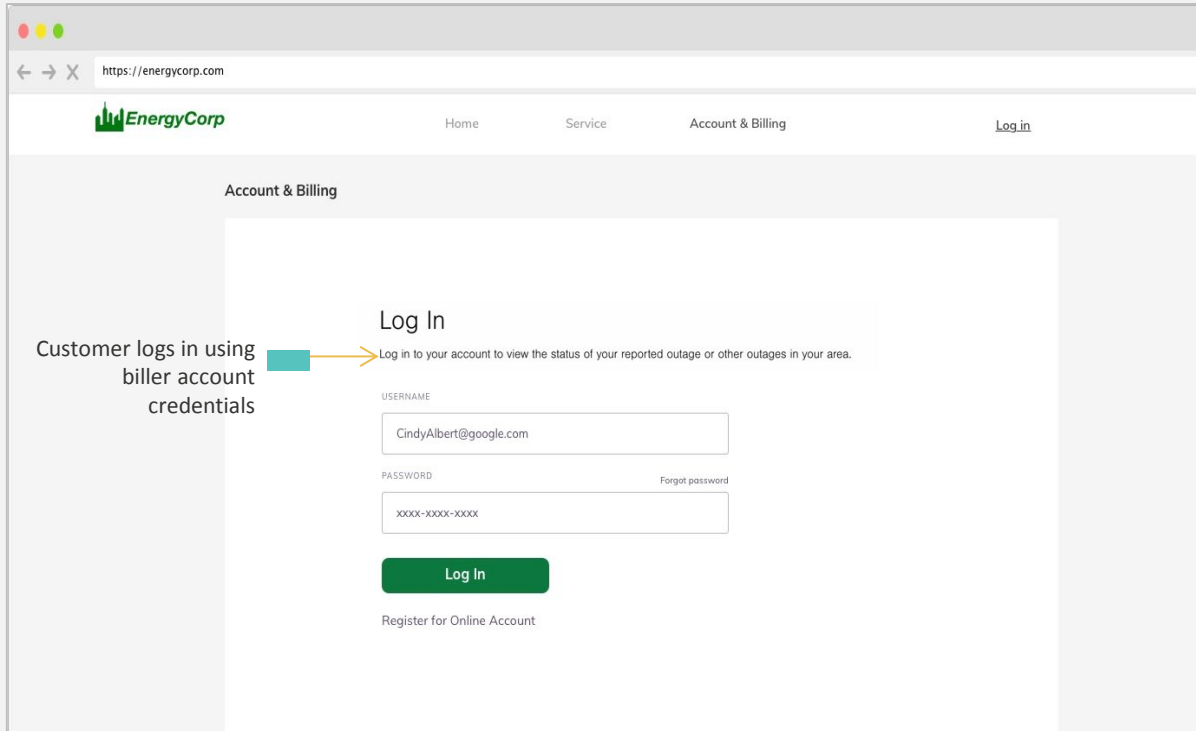
Additional payment method options for the customer to complete his/her bill payment

KEY

- = TCH / RTP payment enabled
- = Biller enabled

Use Case – Customer enrolling in a payment method for the first time, not qualifying for RTP payment

ILLUSTRATIVE



KEY

- = TCH / RTP payment enabled
- = Biller enabled

Appendix

Why should billers know about RTP payments?

How are RTP payments different?

Benefits of RTP Capabilities For Specific Functions in a Biller Organization

Sample RTP payment scenarios

Customer enrollment on biller interface

ILLUSTRATIVE

The screenshot shows the 'Account & Billing' page for EnergyCorp. The current balance is \$94.02. The payment due date is August 21, 2019. The user is prompted to 'Enter your Account and Routing Number'. The form includes fields for 'TYPE OF ACCOUNT' (Savings Account), 'PAYMENT AMOUNT' (\$94.02), 'BANK ACCOUNT NUMBER' (xxxx-xxxx-xxxx-3454), 'CONFIRM BANK ACCOUNT NUMBER' (xxxx-xxxx-xxxx-3454), and 'ROUTING NUMBER' (1233892819). A green 'Add Payment Method' button is visible. Annotations include a blue box pointing to the account type dropdown and a teal box pointing to the 'Add Payment Method' button.

Customer enters payment details (bank account and routing number)

Prompt for the customer to save the payment method

The screenshot shows the 'Account & Billing' page after payment confirmation. The current balance is \$94.02. The payment due date is August 21, 2019. The user is prompted to 'Pay with checking or savings account'. The form includes fields for 'TYPE OF ACCOUNT' (Savings Account) and 'PAYMENT AMOUNT' (Enter Date). The user is prompted to 'Enroll in automatic bill pay' and 'Submit Payment'. A green 'Enroll in automatic bill pay' button is visible. Annotations include a blue box pointing to the 'Enroll in automatic bill pay' button and a teal box pointing to the 'Submit Payment' button.

Option for the customer to enroll in autopay

Confirmation of payment using ACH debit (since customer did not qualify for RTP payment)

KEY

- Blue box = TCH / RTP payment enabled
- Teal box = Biller enabled