
 GUAM WATERWORKS AUTHORITY	STANDARD OPERATING PROCEDURE	No.	SOP-1200-IT-006
	Processing and Issuance of GWA Billing Statements	Effective Date	1/26/2024
		Final Approver	 Miguel C. Bordallo, P.É. General Manager
		Revision Letter	A

1.0 Purpose

This Standard Operating Procedure (SOP) establishes the procedures and guidelines to ensure accurate processing and timely issuance of GWA billing statements.

This SOP also summarizes the *GWA Billing Cycle* as shown in **Attachment 1**.

2.0 Scope

This SOP covers the procedures from meter reading to the mailing of billing statements to GWA customers. It applies to personnel from the GWA Customer Care Section (CCS), Finance, Information Technology Division (IT), and any Vendors that may provide services such as printing and mailing GWA billing statements.

3.0 Policy

To provide accurate and timely billing statements to customers by using appropriate internal controls to ensure quality control and proper coordination of all the steps in the GWA Billing Cycle.

4.0 Definitions

- 4.1. **CC&B:** Oracle Utilities Customer Care and Billing (CC&B) is a complete billing and customer care application for utilities serving residential, commercial, and industrial customers.
- 4.2. **Exceptions:** High or unusual bills resulting from system estimates.
- 4.3. **File Transfer Protocol (FTP):** A standard network protocol used for the transfer of computer files between GWA and the Vendor's server on a secured computer network¹.
- 4.4. **Nightly Billing Details Report:** Report generated from the Nightly Billing Process which contains customer account information, such as consumption.
- 4.5. **Nightly Billing Process:** Processing of meter readings to determine customers' consumption for the month and to generate corresponding billing statements.
- 4.6. **PDF GWA Print/PDF Billing Statement:** PDF version of the contents of POSTROUTW billing extract file
- 4.7. **POSTROUTW billing extract file:** Billing statements generated by CC&B on all customer accounts processed during the Nightly Billing Process.
- 4.8. **System Estimate:** An estimated bill generated by CC&B for an account resulting from the failure to register a meter reading on a customer account during the Nightly Billing Process due to one or more of several potential causes.

¹ https://en.wikipedia.org/wiki/File_Transfer_Protocol

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4.9. **Users:** AR Accountant III (AR Supervisor), AR Accountant I, IT Programmer Analyst, IT Operator, Meter Reading Unit (MRU) Meter Readers, Utility Service Division (USD) Customer Care Representatives, and other GWA employees that perform specific duties relating to GWA billings as discussed in this SOP.

5.0 Roles and Responsibilities

5.1	General Manager (GM)	Approves all changes in this SOP. Manages and controls the overall operations and all properties of GWA.
5.2	Assistant General Manager - Administration and Support (AGM-AS)	Oversees the development, revisions, and implementation of this SOP as the Policy Owner.
5.3	Chief Financial Officer (CFO)	Reviews this SOP annually and makes a necessary recommendation(s) to the AGM-AS, particularly with issues specific to Finance.
5.4	Controller IT Manager CCS Administrator	Monitor divisional personnel to ensure compliance with this SOP. Review this SOP annually and make necessary changes to be presented to the AGM-AS for consideration.
5.5	Utility General Accounting Supervisor (GAS) Systems & Programming Administrator (SPA) Meter Reading Unit (MRU) Supervisor CCS Supervisor	Supervise and monitor sectional personnel to ensure compliance with this SOP. Any incident should be properly documented and reported promptly. Conduct the necessary review of the processes established under its section to detect irregularities and errors and make the necessary corrections before final bill processing and printing. Ensure timely submission of reports/files needed to process and issue the GWA billing statements on time. Resolve errors encountered during the nightly billing process.
5.6	Users	Strictly abide by the contents of this SOP and conduct activities accordingly. When confronted by a situation not covered by this SOP or requiring clarification, seek the manager's, administrator's, or supervisor's assistance.

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6.0 Procedure Description

6.1. **Meter Reading (by MRU):** MRU initiates the billing process by performing the following procedures:

6.1.1. **Download:** The MRU Supervisor clears old files in the laptop to download the new route/reading schedule for the day. Thereafter, the MRU Supervisor distributes the assigned route to the meter readers.

6.1.2. **Reading Route:** The meter reader proceeds to the assigned route for the day to do the following:

6.1.2.1. pick-up meter readings for the assigned route;

6.1.2.2. verify exceptions noted from the reading schedule;

6.1.2.3. update GPS coordinates, meter locations, Route-Book-Sequence, and report to MRU Supervisor or Customer Care Representatives the discrepancies found;

6.1.2.4. complete assigned field activities such as data log retrieval, meter changes, and other fieldwork activities; and

6.1.2.5. return to the MRU office and turn in Completion of Assigned Route for the day.

6.1.3. **Meter Reading Upload:** MRU supervisor compiles all submitted meter readings for the day, reviews for error, and uploads the meter readings file to the completed reads shared folder:

6.1.3.1 **Meter Reading Schedule:** Meter reading should be completed and uploaded one day in advance before the window start date of billing. The Meter Read Schedule is mutually agreed upon by the MRU Supervisor and GAS (General Accounting Supervisor) before the commencement of a calendar year. This is to ensure that the billing days for each route are carefully planned, avoiding billing cycles that are shorter than 28 days or longer than 35 days.

6.1.3.2 **Meter Reading Upload:** The MRU supervisor should make sure all required fields have accurate entries to avoid delay in the billing process and will upload the meter readings file to the completed reads shared folder

6.1.3.2 **Upload Error:** In case an error is encountered during the upload that prevents the nightly billing process (e.g., field data did not meet the required length, no entry on reader initial field, etc.), the MRU supervisor notifies USD-Utility Services Administrator and IT operator on duty (via email and telephone call) of the mentioned error and its consequential delay.

If the error was noted on the window start date of billing and an adjustment is necessary, the MRU supervisor should also notify Utility GAS (via email

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and telephone call) to make appropriate adjustments to the billing schedule.

If the error was noted by IT, the latter should return the upload file to MRU for correction and the MRU supervisor should follow the notification required in the 2 preceding paragraphs. Once the error is corrected, MRU will re-upload the file and notify IT.

The resolution of customer accounts removed to eliminate errors is addressed in Section 6.3.

- 6.1.4. **Notice of Upload:** MRU supervisor notifies the assigned IT Programmer Analyst of the upload, through email and telephone call.
- 6.2. **Processing of the Meter Readings (by IT):** As soon as the IT Operator receives information from the MRU of the upload of meter readings, he/she should begin processing the readings to determine the ratepayer consumption:
 - 6.2.1. **Importing Meter Reads to the CC&B Folder:** Upon receipt of the Notice of Upload, IT Operator imports the meter reading files from the completed reads shared folder to the upload folder:
 - 6.2.1.1. The IT Operator will execute a workflow process scheduling tool to upload the data from the meter read upload file to CC&B.
 - 6.2.1.2. The IT Operator will run the Meter Upload Count Status Validation Report after every Meter Reading Upload process to validate that the meter reading upload was completed and updated in the CC&B database.
 - 6.2.2. **Running of Nightly Billing Process:** The Nightly Billing Process automatically runs at 7:00 P.M. on the date previously entered in the CC&B.
 - 6.2.3. **Monitor the Nightly Billing Process:** The IT Operator is responsible for monitoring the Nightly Billing Process.
 - 6.2.3.1. When an error occurs, the log is generated and UC4 sends email to the following: 1) IT Manager; 2) SPA; 3) IT Programmer Analysts; and 4) IT Operators.
 - 6.2.3.2. IT Operator should record all errors encountered during the nightly billing process in the Error Log which resides in the content experience cloud accessible by: 1) AGM-AS; 2) CFO; 3) ACFO; 4) Controller; 5) IT Manager; 6) SPA; and 7) IT Programmer Analysts.
 - 6.2.3.3. The error should be resolved by the IT Operator on duty. Once solved, a description of the action taken to resolve the error should be entered in the Error Log.
 - 6.2.3.4. If the error is not resolved, the IT Operator should forward the error to the IT Programmer Analyst. If the IT Programmer Analyst solves the error, he/she should record a description of the action taken to resolve it in the

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Error Log. If the error remains unresolved, the IT Programmer Analyst should escalate it to the GPWA Customer Information System (CIS) System Support Contractor.

6.2.3.5. Errors relating to ratepayer accounts should be resolved either by Utility GAS or USD Supervisor, as the case may be.

6.2.4. **Nightly Billing Report:** The Nightly Billing Details Report is scheduled to run at 9:45 P.M.; the report is emailed to the SPA, IT Operators, Programmer Analysts, Controller, GAS, AR Supervisor, and AR Accountant I.

6.3. **Review of Nightly Billing Report & Removal of Exceptions (by Finance):** After the completion of the Nightly Billing Process, AR Accountant I reviews the Nightly Billing Report for any high or unusual bills resulting from system estimates (e.g., Single-Family Dwelling with \$100k or more bill amount). Any exceptions noted are emailed to SPA and Programmer Analysts for removal from the POSTROUTW billing extract file to ensure that erroneous bills will not be printed and mailed. This should be completed before 8:30 A.M.

The same exception is also forwarded to the USD Supervisor for investigation and bill correction. Accounts that are corrected will be included in the next nightly batch processing. Accounts that cannot be immediately corrected will automatically change to a “pending bill” status after the bill cycle batch is billed. This status shall remain pending and only be cleared after the full resolution of the cause of the pending bill status.

6.3.1. **Pending Bill Alert:** Pending Bill alerts shall be cleared or removed from any GWA account only after the issue causing the pending bill status has been completely resolved and/or the GWA account is confirmed to be accurately billed. At no time is a pending bill alert to be removed from any GWA account without the full resolution of the root cause of the pending bill status.

6.4. **Sending of POSTROUTW billing extract file and PDF GWA Print/PDF Billing Statement for Processing (by IT):** Once Finance completes its review; IT Programmer Analyst uploads the POSTROUTW billing extract file and PDF GWA Print/PDF Billing Statement to the Vendor’s Secure FTP Site for processing.

6.4.1. **Removal of Exceptions and Billing Verifications:** After the removal of Exceptions and completion of PDF Bill generation, IT Operator performs *Billing Verification* (see **Attachment 2**) to ensure that GWA IT is sending the correct POSTROUTW billing extract file to the Vendor.

6.4.2. **Combining of Billing Extract Files:** If there are less than 200 customer accounts generated by the Nightly Billing Process (determined based on PDF file count generated from POSTROUTW billing extract), IT Programmer Analyst withholds its uploading to the Vendor’s Secure FTP Site; these files will be combined with the latest batch of Nightly Billing Process as documented in the *Daily Bill Extract Validation* procedures performed by IT².

6.4.3. **Uploading of Billing Extract File to Vendor Secure FTP Site for Printing:** After “Exceptions” are removed from POSTROUTW billing extract file and before 9:00

² IT performs **Daily Bill Extract Validation** procedures and keeps the detailed/technical process in their file

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A.M., IT Programmer Analyst uploads POSTROUTW billing extract and PDF GWA Print/PDF Billing Statement files to the Vendor's Secure FTP Site.

Thereafter, an email confirming the uploading of the POSTROUTW billing extract file is sent by the Programmer Analyst to the Vendor, SPA, with a copy furnished to the IT Manager, USD-USA, Controller, Utility GAS, AR Supervisor, AR Accountant I, and other IT Programmer Analysts.

6.5. Printing and Mailing of GWA Billing Statements to Customers (by Vendor): Under the Purchase Order, the Vendor is responsible for printing and mailing GWA billing statements the same day upon receipt of data from GWA³ and conducts the following:

- 6.5.1. Run the address information through postal software;
- 6.5.2. Correct invalid addresses (only if applicable);
- 6.5.3. Presort the records;
- 6.5.4. Merge the address data and transactional data;
- 6.5.5. Create a PDF print file;
- 6.5.6. Print the billing statements;
- 6.5.7. Insert the statements into GWA envelopes;
- 6.5.8. Mail to customers through the United States Postal System (USPS);
- 6.5.9. Email the list of undeliverable addresses/es that need correction to GWA SPA, IT Programmer Analysts, Controller, General Accounting Supervisor, AR Supervisor, and AR Accountant I.
- 6.5.10. Send PDF copies of the bills printed and postage statement to GWA IT and Finance.

6.6. Storing of PDF Copies of the Printed Billing Statements (by IT): The IT Programmer Analyst retrieves the PDF files of the bills printed from the Vendor's Secure FTP Site and stores them in the GWA Billing Statements shared folder.

6.7. Correction of Undeliverable Addresses: After the mailing of the billing statements, the Vendor emails to GWA IT & USD the undeliverable addresses:

- 6.7.1. **Download Files:** The IT Programmer Analyst downloads undeliverable address files as soon as the information is received and posts it to the CSR shared folder.
- 6.7.2. **Correction of Addresses:** Customer Care Representatives correct the undeliverable addresses in CC&B.

6.8. Review of Postage Statement (by Finance): AR Accountant I reviews the accuracy of the postage statement received from the Vendor. This is done once a month when the invoice

³ GWA has to provide the data to the Vendor by 10:00 am in order to print and mail billing statements by 1:00 pm

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is validated before processing the payment by reconciling the number of bills mailed indicated in the postage statement against the number of bills printed indicated in the PDF Billing Statement. This is to ensure that GWA will only pay for the actual bills that were printed and mailed.

- 6.9. **Replenishment of USPS Postage Account (by Finance):** Utility GAS ensures that sufficient balance in the USPS Postage account is available to avoid delay in the mailing of GWA bills. To accomplish this, when the USPS Postage account balance falls below \$8,000, an email notification will be sent out to the Utility GAS. This will prompt the preparation of the Postage Replenishment request amounting to \$15,000⁴.
- 6.10. **Review of Printed and Mailed Billing Statements (by Finance):** AR Accountant I conducts random sampling checks of the PDF copies of the bills printed and mailed during the day against the nightly billing report received in the morning. This is to ensure that the printed and mailed billing statements are correct.
- 6.11. **Documentation of Incidents:** Potential, detected, or reported deviations from this SOP by any User should be timely documented in the *Incident Reporting Form (Attachment 3)* and distributed to management. This form is to be completed within 24 hours following the detection or reporting of any incidents, particularly those that deal with safety and security, those that might affect large numbers of customers/employees or might have a financial impact on the Authority. Timely reporting will help mitigate any issues as well as determine if any additional procedures or controls may be needed to prevent a recurrence.
- 6.12. **Communication of Incidents:** All personnel involved in this SOP should be informed of any reported incidents promptly.

7.0 Document Approvals

Role	Position	Name of Approver	Approval Signature	Date Approved
Author	Management Analyst I	Elgine E. Alfonso	Approval on File	On File
Policy Owner	Assistant General Manager – Administration and Support (AGM-AS)	Christopher M. Budasi	Approval on File	On File
Final Approver	General Manager	Miguel C. Bordallo, P.E.	Page 1	Page 1

By existing Guam and Federal laws, the contents of this SOP were reviewed thoroughly by its Policy Owner and were found to be:

- appropriate for publication on the GWA website without compromising the security of GWA's system or the public's health and safety.
- not appropriate for publication on the GWA website because it might jeopardize the security of GWA's system or the public's health and safety.

⁴ Total USPS Postage account is \$15,000. The \$8,000 balance covers 7 billing cycles or 1 and ½ week which is equivalent to the processing time required for payment request

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8.0 Records of Revisions

All suggestions for improvement shall be directed to the Policy Owner indicated below. The Policy Owner will consider the input received, develop recommendations on how to address the suggestions and obtain authorization to make the recommended changes. Updates, revisions, corrections, and waivers to this SOP shall be made in writing and approved by the GM.

8.1. Policy Owner: Assistant General Manager - Administration and Support (AGM-AS)

8.2. Authorization: General Manager

Effective Date	Revision Letter	Document Author	Description of Change
Page 1	A	Elgine E. Alfonso	Initial Release of Policy/Procedure

9.0 References

9.1. AM Badger Download and loading Collector Steps

9.2. GCI Daily Bill Validation

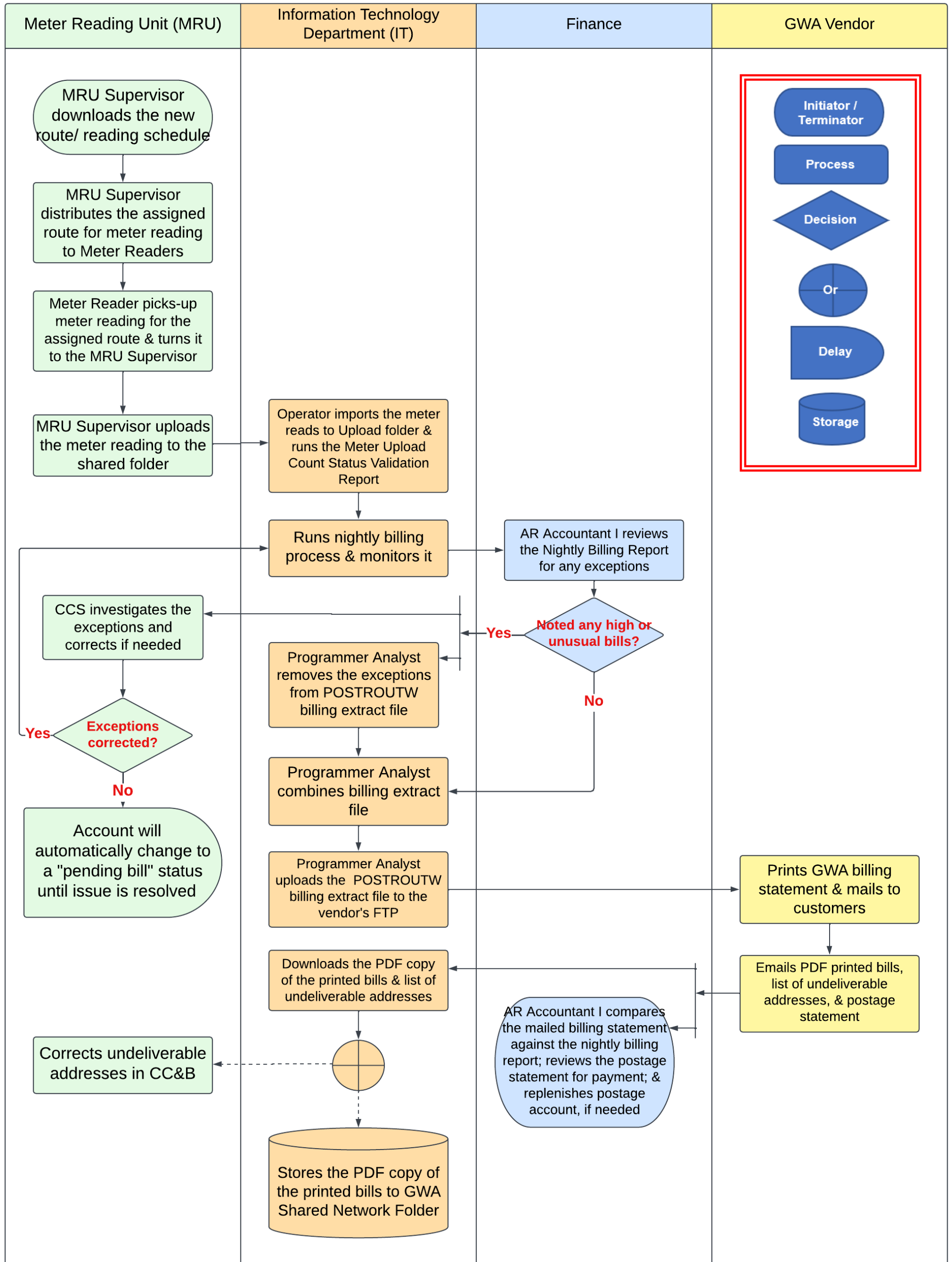
9.3. IT Billing Verification

9.4. GWA Purchase Order, Graphic Center, Inc

9.5. https://en.wikipedia.org/wiki/File_Transfer_Protocol

9.6. Oracle Utilities Customer Care and Billing, Release 2.3.1 Utility Reference Model CC&B
4.3.2.3a Manage Pay Plan

Attachment 1: GWA Billing Cycle Flowchart



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Attachment 2: IT Billing Verification Flowchart

Billing Verification	
<u>STEP 1</u> Previous Bill Verification	<ul style="list-style-type: none"> • Open the previous day's PDF folder (i.e., if today is June 26, check June 25) • Check the first 2 files and the last 2 files for the bill date • If dates are different from the actual folder date, note that on billing comparison check email • Place bill date and count in the operation's checklist • Open the pdf folder from 2 business days (i.e., if today is June 26, check June 24) • Check the first 2 files and the last 2 files for the bill date • If dates are different from the actual folder date, note that on billing comparison check email. • Place bill date and count in the operation's checklist • Note, on Monday, the previous days will be last Friday and last Thursday.
<u>STEP 2</u> After the PDF Bill Generation is Completed	<ul style="list-style-type: none"> • Check the count of the number of bills generated • Check the first 2 bills and the last 2 bills for the bill date • Place the count onto the daily checklist
<u>STEP 3</u> Open the Web Focus	<ul style="list-style-type: none"> • Browse the "Open Webfocus" link in the web browser • Take note of the bills extracted • In the checklist, enter the count for bills extracted • The difference should automatically be calculated
<u>STEP 4</u> Email Snippet	<ul style="list-style-type: none"> • Send the snippet of the computer to IT Manager, System Programmer, and Administrator, IT Programmer Analyst, and cc the IT operators
<u>STEP 5</u> <u>Verify Files Have Been Moved</u>	<ul style="list-style-type: none"> • Move the files from the folder "SAVEDJOBFILES" to the folder of the current year date, e.g., POSTROUTW_2024

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Attachment 3: Incident Reporting Form**Incident Reporting Form**

Instructions: This form is to be completed within 24 hours following the detection or reporting of any incidents, particularly those that deal with safety and security, those that might affect large numbers of customers/employees or might have a financial impact on the Authority. Timely reporting will help mitigate any issues as well as determine if any additional procedures or controls may be needed to prevent a recurrence. All items completed should be based on information that is currently available. This form may be updated and modified if necessary.

1. Contact Information for this Incident	
Name:	
Title:	
Division:	
Work Phone:	
Mobile Phone:	
Email address:	
2. Incident Description.	
Provide a complete description of the incident: <i>(Attach a separate sheet or additional documentation if needed)</i>	
3. Impact / Potential Impact Check all of the following that apply to this incident.	
<input type="checkbox"/> Safety and/or Security <input type="checkbox"/> Damage to GWA property <input type="checkbox"/> Loss / Compromise of Data <input type="checkbox"/> Financial Loss/Impact <input type="checkbox"/> Affect Other Divisions' Processes/Functions <input type="checkbox"/> Damage to the Integrity or Delivery of Critical Goods, Services, or Information <input type="checkbox"/> Violation of legislation/regulation / Policy and Procedures <input type="checkbox"/> Unknown at this time	
Provide a complete description of the impact/Potential Impact: <i>(Attach a separate sheet or additional documentation if needed)</i>	

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Attachment 3: Incident Reporting Form Cont.

4. Sensitivity of Data/Information Involved Check all of the following that apply to this incident.	
Sensitivity of Data	
Category	Example
Public	This information has been specifically approved for public release by Federal/Guam law or Guam Waterworks Authority (GWA) rules, regulations, or policy. Unauthorized disclosure of this information will not cause problems for GWA, its clients, or its business partners. Examples are brochures and material posted to Guam Waterworks Authority web pages.
Internal Use Only	This information is intended for use within the Guam Waterworks Authority or with Government of Guam branches and agencies and in some cases with business partners. Unauthorized disclosure of this information to outsiders may be against laws and regulations or may cause problems for the GWA, its customers, or its business partners. Examples are business process forms, payroll information, draft documents, and physical security plans/documents.
Restricted/Confidential (Privacy Violation)	This information is private or otherwise sensitive in nature and must be restricted to those with a legitimate business need for access. Unauthorized disclosure of this information to people without a business need for access may be against laws and regulations or may cause significant problems for the GWA, its customers, or its business partners. Decisions about the provision of access to this information must be cleared through the information owner. Examples are retirement contribution payments, worker performance evaluation records, legal information protected by attorney-client privilege, customer information, and employee personal information such as social security and direct deposit bank account numbers.
Unknown/Other	Describe in the space provided
<input type="checkbox"/> Public	<input type="checkbox"/> Restricted / Confidential (Privacy violation)
<input type="checkbox"/> Internal Use Only	<input type="checkbox"/> Unknown / Other – please describe:
Provide a brief description of data that was compromised: (Attach documentation if needed)	
5. Who Else Has Been Notified?	
Provide Person and Title:	
6. What Steps Have Been Taken So Far? Check all of the following that apply to this incident.	
<input type="checkbox"/> No action taken	<input type="checkbox"/> Incident Reported to Supervisor/Manager
<input type="checkbox"/> Immediate Action taken	<input type="checkbox"/> Incident Reported to Affected Division
<input type="checkbox"/> Other – please describe:	<input type="checkbox"/> Incident Reported to Upper Management

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Attachment 3: Incident Reporting Form Cont.

Provide a complete description of steps/actions taken so far: ***(Attach separate sheet or additional documentation if needed)***

7. Incident Details

Date and Time the Incident was discovered:	
Has the incident been resolved?	
The physical location of the incident:	
Number of sites affected by the incident:	
Approximate number of customers/employees affected by the incident:	
Approximate number of divisions affected by the incident:	
Are non-Guam Waterworks Authority systems, such as business partners, affected by the incident? (Y or N – If yes, please describe)	
Please provide any additional information that you feel is important but has not been provided elsewhere on this form.	

Prepared by: _____ Signature: _____ Date: _____
(Name and Title)

Investigated by⁵: _____ Signature: _____ Date: _____
(Name and Title)

Acknowledged by⁶: _____ Signature: _____ Date: _____
(Name and Title)

Please submit this completed form to:

cc: AGM-AS and CFO

Affected Manager(s) from Other Division(s).

For any incidents resulting in adverse action or business interruptions greater than one (1) hour, the General Manager, Human Resources, and Internal Audit must be copied.

⁵ Immediate Supervisor.

⁶ Division Manager.