

UE-990473

Graciela Etchart
06/12/2000
» computer change estimates

11:35:11 AM

Jim Russell
06/12/00 10:59 AM

To: Vicki Elliott/WUTC@WUTC, Tani Thurston/WUTC@WUTC, Pam Smith/WUTC@WUTC
cc: Graciela Etchart/WUTC@WUTC
Subject: computer change estimates

FYI (been scanned).

----- Forwarded by Jim Russell/WUTC on 06/12/00 10:58 AM -----



"Folsom, Bruce"
<bruce.folsom@avista corp.com>
06/12/00 09:51 AM

To: "jrussell@wutc. wa. gov (E-mail)" <jrussell@wutc.wa.gov>
cc: "Webb, Renee" <RWebb@avistacorp.com>, "Holden, Shelley" <shelley.holden@avistacorp.com>, "Olson, Judy" <Judy.Olson@avistacorp.com>
Subject: computer change estimates

Jim:

The attached files provide information responsive to your question about cost documentation for Avista computer changes. Please take under consideration two items as you look at our data.

First, please understand, as stated in the cover letter, that this cost estimate is subject to change (in an upward manner).

Second, I would happy to arrange a phone call with you so that our computer experts can explain the ins and outs why the proposed rule changes would have such an impact on our computer code.

--Bruce

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RWD

June 12, 2000

Jim Russell
Washington Utilities & Transportation Commission
1300 S. Evergreen Park Drive S.W.
P.O. Box 47250
Olympia, Washington 98504-7250

Dear Jim:

In response to your recent request, enclosed is an estimate of computer changes to Avista Utilities' billing and accounting system that would be necessitated by the Commission Staff's proposed electric and natural gas rules.

The proposed rule changes would, in essence, require a rebuilding of the Company's customer accounting system from the "bottom up." Therefore, this is a preliminary estimate subject to change. This estimate was prepared in April of this year and is an expanded version of a previous estimate that we included in our September, 1999 comments (of which the relevant pages are attached).

In no way should this estimate be considered a cost "ceiling"; the costs could exceed this estimate. Should we proceed on this project, Avista Utilities would seek a detailed analysis that would, in turn, require several months at a material cost to produce. Furthermore, there have been additional changes to our system since the original estimate was put together; these changes would need to be evaluated and incorporated into the estimate as we go forward.

Let us know if you would like more detail about the components of this high level estimate or a presentation on the structure of the Company's customer information system. I would be happy to arrange a teleconference with you and our experts to discuss this further.

Please call me at (509)495-8706 regarding any questions.

Sincerely,

Bruce Folsom
Rates and Regulation

enclosure



Requirements 1 and 2 have been estimated together because they must be done together. The remaining requirements are estimated separately because they could be implemented individually.

This estimate was developed based on high level requirements, with minimal user input. As a result, this estimate could increase as much as 30% and decrease as much as 10%. As the project requirements are further defined, the estimate will be refined.

The duration selected for this project (18 months) was selected so that we could estimate the Project Management time and DA/DBA time, since both of these activities will cover the length of the project. When the estimates are more refined we will be able to review the dependency of tasks and come up with a more accurate timeline.

High Level Estimate for Requirements 1&2

Current Situation:

Avista's Customer Service System (CSS) is designed around the concept of having one customer account per service address with multiple services associated with the customer account. Charges for each service, including metered and non-metered services, are consolidated into one customer account. Current charges are shown on the customer statement individually, but do not include enough detail for the customer to recalculate the charges for each service. Payments, collections and other financial transactions are performed against this consolidated account, including CAEs, Cancel/Rebills.

Proposed Situation:

The proposed changes to WUTC rules requires a major redesign of the Customer Service System to account for charges at the service level. Under this preliminary high level design, charges for each individual service would be stored separately, possibly resulting in more than one account associated to a given service address (i.e. one account for each service or meter, including gas, electric, flat rate, area light, products, etc). These individual service accounts would be associated with a unique customer account. There would also be one service account for miscellaneous charges (i.e. return check charges) that would be associated to the customer account. All of the charges at the service level would be totaled into the charges at the customer account level.

There would be a new statement for each customer account that would show previous balance, current charges, payments and amount due for each service as well as enough detail for the customer to recalculate the charges for each service. A grand total, including all outstanding charges, would be summarized (these will match the totals in the customer account). The customer would be given the opportunity to identify payment dollars to be applied toward specific service accounts on the stub (i.e. apply partial payment to their electric charges). The cash processing equipment would need to be modified to support this additional information and CSS payment



processing would require extensive changes to support this new hierarchy of payments, including prorating unidentified partial payments according to the amounts billed for each service.

Collections would need to be changed so that notices, shut off etc. will be done at the service level. Each service would need to be checked to see if a notice should go out because a payment has not been received. Deposits would be modified so that each service could require a separate deposit.

Changes are complicated because the majority of all the programs/reports/notices/ processes use the existing customer account; these would all have to change to support the new requirement. There would also be significant database changes and a data conversion required to support this change.

Requirement 1 (256 months)

New Rule. Combination Utilities. Electric service may not be disconnected for any amount owing for regulated natural gas service or for any non-regulated services.

Batch (106 months)

- Open/Close (8 months)
- Financials – GL interface/CAE (8 months)
- Billing – new statement and associated process (24 months)
- Payments – Requirement 2) apply payments received from remittance processing to multiple accounts (18 months)
- Database changes will require most programs to change, as well reports, external processes, and PRF's-both user and production (18 months)
- Metering Changes (6 months)
- Collection Changes (12 months)
 - All notices would need to change verbiage since we will be collecting at the service level
 - Some notices may want to combine services on the notice so that customer does not get a separate notice for gas and a separate for electric
- Letter processing - some will need changes to break out each service, some need to combine service (6 months)
- Write Off - change automatic write off to occur at the service level; also change the write off reports (6 months)

Online (60 months)

- Finder Changes (5 months)
- Manage Multiple service accounts (3 months)
- Open/Close, Cancel/Rebill/Special (12 months)



- Field Request (3 months)
- Manage service, line items, history (12 months)
- Master Account/Products Services (3 months)
- CAE and Financials (4 months)
- Navigational Changes (4 months)
- On line cash (1 month)
- Work Management System (6 months)
- IVR (3 months)
- Electric Facility Management (4 months)

Requirement 2 (Included in estimate for Requirement 1) (18 months)

New Rule. If a residential customer is billed for both gas and electric services and pays a portion of the total amount billed, the electric utility must allow the customer the option of the payment to the service of their choice. If the customer makes a partial payment and does not choose to which service the payment will apply, the utility must apply the payment to both services on a prorated basis according to the amounts billed for each service.

Payment Posting

- Modify edit program to process new payment file from Remittance processing,
- Write new subroutine to determine prorating percentages
- Update CUST_PAYMENT with flag to denote if payment was applied per customer request or by prorating percentage
- Need to determine how internal tables will change for this processing (Tran_register, Balance Control totals, cust_payment etc)
- Need to determine how CLB, Products and Services, deposits, Prior obligation, project share, Neighbor center payments are processed

DA and DBA Support (18 months)

- .5 DA and .5 DBA for length of the length of the project

Database Conversion (24 months)

Testing (10 months)

- System Testing – 2 individuals for 3 months
- User Acceptance Testing – 2 individuals for 2 month

Implementation (2 months)

Project Management (36 months)

- 1 project Manager for duration of project



- 1 Technical Lead for duration of project

External Cost (\$40,000 + ???)

- Remittance changes to handle new stub. This would be done by Bancotec (\$15,000)
- Bancotec Hardware changes needed to handle new stub so that machines can read more than one scan line (\$???,000)
- Checkfree would need to change their HTML for the new bill (\$25,000)
- Additional mail costs for more multi-page bills (\$xx,000)

Additional Software (\$95,000)

- Key/ADW (\$4,000 / person x 15 people) \$60,000
- Smalltalk (\$5,000 / person x 7 people) \$35,000

Additional On-Going Expenses

- -CPU Time – expect an increase in CPU processing times from 20-50 percent from existing levels. (up to \$46,000/month)
- -Storage – expect an increase of 10-15 percent in storage space – currently 60-70 GIG. (up to \$3,140/month)
- -Print Lines – expect an increase of 40-60 percent in print lines. (up to \$12,000/month)
- -Support – the additional complexity may require additional system support. An increase in 1 individual in the support of CSS should be anticipated. (\$10,000/month)

Estimated duration of entire project	18 months
Estimated project size	256 months (15 people for 18 months)
Estimated EDS labor for Project	\$3,264,000 (\$12,750 x 256 months) (\$85/hours or \$12,750/month, TDY costs are not included in the labor cost)
Estimated Avista Labor	\$x,xxx,000



High Level Estimate for Requirements 3 - 12

Requirement 3

New Requirements. Bills must include the current and previous meter readings, the current read date and the total amount of kilowatts used for each billing rate, the applicable billing rate, and the minimum bill and any other applicable tariff charges.

Rather than adding this information to the existing Avista (WWP) customer bill, it would make sense to switch all customers to the existing WPNG bills and make use of the database tables for billings as designed for WPNG and the various billings steps, etc. This effort was estimated in the recent past (see Help Desk Case id 671). (Online display of the bill must include this information).

Batch	300 hours
On-line	45 hours
Total	345 hours

Requirement 4

New Requirements. Bills must compare energy usage information for the current month and same billing month of the previous year for the following:

1. Number of days in billing period,
2. Kilowatts used
3. Average kilowatts used per pay.

- On-Line estimate included in requirement 3.

The bill already shows average use per day for the first service on WPNG bills and the first electric and gas service on the rest of the Avista bills. These averages are passed in the billing event at the service level.

Proposal: Add the days in period and total kilowatts used for each service, increasing the billing event size. Billing will need to format a line for each service and somehow identify the service it represents. It looks like the current bill format for non-WPNG bills would have difficulty supporting this information. This does depend on a bill-design on the non-WPNG bill, Recommend that non-WPNG customers be switched to the WPNG format of customer bills. This alternative was estimated in #3 above. However, the current requirement would depend on a change to the current bill to accommodate the information for each service.

For billing to make modifications to support the required change, the programs using the bill event file and populating CSGAR for billing would need to be changed. Also, changes would be required to programs populating information for the customer bills and formatting of the customer bills.

- **Batch Estimate: 140 hours**



For the information to be carried on anything other than a regular period bill (cancel/rebill of previous periods or duplicate bills), similar logic to that used in metering to retrieve data and calculate average temperature and usage plus averages for the same period a year ago would need to be added to the cancel/rebill and duplicate bills routines.

- **Batch Estimate: 250 hours**

One example if the bills are reformatted to look like the current WPNG bill:

AVERAGE DAILY TEMPERATURE	THIS YEAR	42.0	LAST YEAR	38.0
METER NUMBER: 0Z249684W				
LAST YEAR	DAYS OF SERVICE	29	TOTAL USE	348 AVERAGE DAILY USE 12
THIS YEAR	DAYS OF SERVICE	33	TOTAL USE	128 AVERAGE DAILY USE 4
CONSUMPTION	03/09/00		128.0000 THERMS @ .52668	67.42
BASIC	03/09/00			4.00
METER NUMBER: 00602844				
LAST YEAR	DAYS OF SERVICE	29	TOTAL USE	???? AVERAGE DAILY USE ??
THIS YEAR	DAYS OF SERVICE	33	TOTAL USE	320 AVERAGE DAILY USE 10
CONSUMPTION	03/09/00		320.0000 THERMS @ .52668	168.54
BASIC	03/09/00			4.00

Requirement 5

New Requirement. Bills must show the amount of any municipal tax surcharge and their respective percentage rates.

There is currently a message on the customer bills for Washington residents stating the municipal tax rate and the amount of their bill that is attributed to that tax. A similar message could be added for all bills where there is municipal tax built into their rate structure.

- **Batch Estimate: 20 hours**
- No on-line changes.

Requirement 6

New Rule. When a residential customer contacts the utility regarding a delinquent account, the utility must offer extended payment arrangements appropriate for both the customer and the utility. The customer may enter into one six-month payment arrangement prior to disconnection of service during the customer’s total service time with the utility.



- A table will be added to contain a date that the new 6 month arrangement was added, along with the customer account number that the arrangement was made for. This new table will be associated with the Customer table. The Payment Arrangement view will need to show this new arrangement type, and also display the date and account when it has been used by the customer. Two new host components will need to be written for the updates and retrieves.
- **On-line estimate 75 hours.**

Requirement 7

When the service address is different from the billing address. If the customer of record and the service user are not the same party, the utility will send a past due notice and a final notice to the service address and in addition to the mailing address.

- When Collections checks Bill Mail Address it will compare the Bill Mail Address to the Service Address. If the addresses are different, and a Past Due or Final notice is required, it will create a notice record for each address. No on-line changes are needed.
- **Batch Estimate = 50 hrs.**

Requirement 8

The utility may not estimate more than two consecutive billing cycles, unless the cause of the estimation is inclement weather, terrain, or a previous arrangement with the customer.

- Many of the weather and terrain estimates come into CSS from Itron as “forced complete” routes. There is no indication of why they were unfinished and need to be estimated. A manual update of each individual service is not practical because this could involve hundreds of premises.
- Proposal: New table to record the date and reason for estimating a service. New online function that allows the client to enter a route, date and estimate reason that would then go out and create an entry in this new table for each service on the route. This means even services that weren’t estimated (assuming part of the route was read successfully) would get this entry. Online would also allow entries into the table for individual services (or premises if that makes more sense). This would be used when only a few services were bypassed or on service order situations. Two new host components and two new screens required.
- Meter reading edits performed in DWWPA0M4 (WA0SM400/WA0SO401) already produce a warning if more than 3 months are estimated. This would change to look for 2 months of estimates if it has a request for an estimate this month. It would then look in the new table for the dates that match this month and those two most recent months to see if any of the reasons were the allowable weather, terrain or customer arrangement. If any were allowable, it will do



the estimate. If none fell into those 3 categories, it would reject the estimate until an allowable reason was entered.

- The entries in this new table could be purged after four months or so but you would probably want to keep them around if you wanted the same edits to still work for cancel/rebills.

Estimate:

New table: 24 hours
Online: 97 hours
Batch: 30 hours
TOTAL: 151 hours

Requirement 9

Can't collect deposit from previous customer unless there has been 3 or more delinquency notices in a 6-month period within the last 12 months. (WA only)

- If done in Batch (These are also being estimated as online tasks) #9 and #11 could use essentially the same procedures.
- Create a new table, connected to Customer.
- The new table would contain 12 occurrences of the Collection Action + Collection Action date. It may or may not also contain flags for deposit request (Y or N) and Refuse service (Y or N).
- Each time there is a Collection Action event (in Aging or Collections) this table would be updated for the given month with the appropriate Collection Action and the date.
- This table would be used by host components to determine if we could request a deposit or refuse service to a Customer.
- **Batch estimate 90 hours.**
- When opening an account, the system will check cust-roles for the customer and retrieve accounts that were open in the last 12 months. It will then check the collection activity table to see if there were 3 or more delinquency notices for these accounts in a six month period. It will allow deposits to be taken if these conditions are met. Note: This will affect the recent work done on the WOLEP project and will significantly slow down the open process.
- **On-Line estimate 50 hours.**



Requirement 10

New Rule. The utility may refuse to provide service if the customer that is known by the utility to have fraudulently obtained service. (theft – second offense).

- Before doing an open, the system will look to see if the customer has more than two diversion incidents. If they do, it will flag the open screen so the rep can then determine if the account can be opened.
- **On-Line estimate 30 hours.**

Requirement 11

Utility may not refuse service to Customer who has 2 or less prior obligations in one calendar year.
(WA only)

- If done in Batch (These are also being estimated as online tasks) #9 and #11 could use essentially the same procedures.
- Create a new table, connected to Customer.
- The new table would contain 12 occurrences of the Collection Action + Collection Action date. It may or may not also contain flags for deposit request (Y or N) and Refuse service (Y or N).
- Each time there is a Collection Action event (in Aging or Collections) this table would be updated for the given month with the appropriate Collection Action and the date.
- This table would be used by host components to determine if we could request a deposit or refuse service to a Customer.
- **Batch estimate 90 hours.**
- When opening an account, the system will check cust-roles for the customer and retrieve accounts that were open in the last 12 months. It will then check the collection activity table to see if there were 3 or more disconnect notices for these accounts in the calendar year. The rep will be notified that we may refuse service to this customer. This will slow down the processing of the open request.
- **On-Line estimate 35 hours.**

Requirement 12

New Rule. The utility may discontinue service without notice when a customer has used service prior to applying for service.

- **Batch estimate 40 hours.**

Rule and proposed edits: WAC 480-100-161 Portable indicating instruments....

(3) Electric utilities must adjust portable analog indicating instruments that are found appreciably in error at zero. If a portable analog indicating instrument is in error by more than 1 percent at commonly used scale deflections, the electric utility must adjust it, unless the instrument is accompanied by a calibration card.

Purpose of edits: This rule appears to relate to analog instruments, hence the proposed clarifying edits.

III. Preliminary Financial Impact of Staff's Proposed Consumer Rules on Avista

Staff has proposed several changes to the consumer rules that would have, if adopted by the Commission, material financial impact on the Company. These changes would result in at least \$5.7 million in increased expenses to the Company. Avista believes that this is an unintended consequence; certainly, costs and benefits of the Staff's consumer rules, as proposed on September 14, were not addressed at the June 3 and June 24 informal workshops. Nor is this impact contemplated by Governor Locke's seven principles.

The costs to Avista are as follows.

Staff Proposal	Cost to Avista	Source of Cost
Pro-rated partial payment and billing requirements	\$2,810,000	Computer programming
	1,500,000	Ancillary mainframe change and support
Payment arrangements	1,200,000	Increased carrying charges
	200,000	Increased write-offs for delinquent accounts
Winter low-income	unquantified	Will increase carrying charges
Deposit requirements	unquantified	Deposits currently are applied to accounts
Two month estimations	unquantified	Staffing issues for remote meter routes
Payment location changes	unquantified	Monthly changes and resulting costs
Tariff notification	unquantified	Adds 30 days to effective date
Medical certifications	unquantified	Harder to verify; extends payment
Total minimum cost	\$5,710,000	

These costs are such that the Company would seek hearing before the Commission on these issues. Attached, in support of the computer programming costs, is a summary of