



Control Number: 28840



Item Number: 303

Addendum StartPage: 0

**SOAH DOCKET NO. 473-04-1033
PUC DOCKET NO. 28840**

**APPLICATION OF AEP TEXAS § BEFORE THE STATE OFFICE
CENTRAL COMPANY FOR § OF
AUTHORITY TO CHANGE RATES § ADMINISTRATIVE HEARING**

**RECEIVED
2004 FEB -4 PM 3:06
PUBLIC UTILITY COMMISSION
FILED CLERK**

**AEP TEXAS CENTRAL COMPANY'S RESPONSE TO
CITIES' THIRTY-FIFTH REQUEST FOR INFORMATION**

FEBRUARY 4, 2004

TABLE OF CONTENTS

<u>SECTION</u>	<u>FILE NAME</u>	<u>PAGE</u>
RESPONSE NO. 1	35cit01.doc	2
ATTACHMENT TO RESPONSE NO. 1	35Cit1.xls	3
RESPONSE NO. 2	35cit02.doc	4
ATTACHMENT 1 TO RESPONSE NO. 2	35Cit2Att1.doc	5
ATTACHMENT 2 TO RESPONSE NO. 2	35Cit2Att2.xls; 35Cit2Att2.doc	6-8
RESPONSE NO. 3	35cit03.doc	9
RESPONSE NO. 4	35cit04.doc	10-11

**SOAH DOCKET NO. 473-04-1033
PUC DOCKET NO. 28840**

APPLICATION OF AEP TEXAS	§	
	§	BEFORE THE STATE OFFICE
	§	
CENTRAL COMPANY FOR	§	OF
	§	
AUTHORITY TO CHANGE RATES	§	ADMINISTRATIVE HEARINGS

**AEP TEXAS CENTRAL COMPANY'S RESPONSE TO
CITIES' THIRTY-FIFTH REQUEST FOR INFORMATION**

Question No. 1:

Follow up to Response to Cities 10-12, Attachments 1-26

- (a) For each of the attachments, provide the current status of the business case and all updated analyses and cost estimates.
- (b) Identify all approved business cases with start date, expected completion date and full analyses.

Response No. 1:

Please see the attachment for the information requested in parts (a) and (b).

Prepared By: Kenneth R. Roberts
James H. Sorrels
Sponsored By: Jeffry L. Laine

Title: System Coordinator
Mgr. Customer Choice Ops.
Title: Dir. Customer Choice Ops.

Question 35-1		PROJECT	BUSINESS CASE STATUS	UPDATED ANALYSES	IT COST	START DATE	COMPLETION	FULL ANALYSES
1.	CHG 724087	TX Competitive Metering, TX SET 1.6	Approved	N/A	\$32,640	Fall 2003	1/1/2004	N/A
2.	CHG 721327	PLUCT Project NO. 24462 - Performance Measure for the Retail Electric Market	Hold	N/A	27,200	N/A	N/A	N/A
3.	CHG 726234	Process Switch on ACTDIS Account	Approved	N/A	34,000	Feb. 2004	7/23/2004	N/A
4.	CHG 724085	TX Service Order Parking Lot	Approved	N/A	435,000	Jan. 2004	7/23/2004	N/A
5.	CHG 724542	TX Workaround EDI as MVI Transaction	Cancelled	N/A	N/A	N/A	N/A	N/A
6.	CHG 724539	TX Zero Day Finals	Cancelled	N/A	4,216	N/A	N/A	N/A
7.	CHG 734614	AD HOC Historical Usage Resonse Changes	Approved	N/A	7,320	Jan. 2004	3/19/2004	N/A
8.	CHG 726995	Increase Sends of Messages Sent to MDCH	Approved	N/A	8,280	N/A	N/A	N/A
9.	CHG 726386	Remove MACSS dependence on O470's from MDCH for TX	Approved	N/A	2,448	Sept. 2003	10/17/2003	N/A
10.	CHG 726386	Permit Responses on MVI's for New Installs	Approved	N/A	2,448	July, 2003	8/22/2003	N/A
11.	CHG 732235	SDI Analyzer Enhancements	Approved	N/A	76,120	Oct. 2003	12/19/2003	N/A
12.	CHG 736394	Send Invoice Rejects to DIPR	Approved	N/A	5,440	Nov. 2003	12/19/2003	N/A
13.	CHG 742671	Priority/Safety Net Move-In Changes	Approved for IT Proposal	N/A	N/A	N/A	N/A	N/A
14.	CHG 736265	Texas CR Billing from MACSS	Approved for IT Proposal	N/A	N/A	N/A	N/A	N/A
15.	CHG 737849	Cycle Change Between Transaction Acceptance and Request Date	Approved for IT Proposal	N/A	N/A	N/A	N/A	N/A
16.	CHG 738633	Remove Meter Without Receipt of Move out	Not Approved	N/A	112,500	N/A	N/A	N/A
17.	CHG 745249	Monitor Safety Net Requests	Approved for IT Proposal	N/A	N/A	N/A	N/A	N/A
18.	CHG 734713	Unexecutable Block for Off-Cycle Switches	Approved for IT Proposal	N/A	N/A	N/A	N/A	N/A
19.	CHG 735568	Unexecutable Message on CH08 Orders	Approved	N/A	1,200	Dec. 2003	1/23/2004	N/A
20.	UWS Project CKR05		Duplicate of # 14	N/A	N/A	N/A	N/A	N/A
21.	UWS Project CKR10	- only 1 has been implemented (Switch Blocking for Contract Acts - Project approved 11/03, no target date)	Pending	N/A	168,640	N/A	N/A	N/A
22.	UWS Project CKR11	- currently, no work have been approved	Pending	N/A	108,800	N/A	N/A	N/A
23.	UWS Project CKR13	- Some small projects dealing with I220 rejects have been implemented, other projects identified are still in the planning stages.	Pending	N/A	195,840	N/A	N/A	N/A
24.	UWS Project CKR14	Attachment should be included within #8 above	Duplicate of # 4	N/A	N/A	N/A	N/A	N/A
25.	UWS Project CKR05	involves improvements to DIPR and is related to #14 above	Duplicate	N/A	N/A	N/A	N/A	N/A
26.	UWS Project CKR09	involves several projects involving messaging. #8 above is one of them. Other projects identified are still in the planning stages.	Pending	N/A	223,040	N/A	N/A	N/A

Approved for IT Proposal - Customer Operations Directors have approved the IT project, but IT hasn't estimated the cost of the project.
Pending - IT Project hasn't been present to Customer Operations Directors for approval.
Not Approved - project present to Customer Operation Directors, but not approved to work.
Cancelled - project cancelled prior to requesting approval from the Customer Operations Directors.

**SOAH DOCKET NO. 473-04-1033
PUC DOCKET NO. 28840**

APPLICATION OF AEP TEXAS	§	
	§	BEFORE THE STATE OFFICE
	§	
CENTRAL COMPANY FOR	§	OF
	§	
AUTHORITY TO CHANGE RATES	§	ADMINISTRATIVE HEARINGS

**AEP TEXAS CENTRAL COMPANY'S RESPONSE TO
CITIES' THIRTY-FIFTH REQUEST FOR INFORMATION**

Question No. 2:

Follow up to Response to Cities 15 Question 2 Attachment 1

- (a) For this attachment, provide the current status of the business case and all updated analyses and cost estimates.
- (b) Indicate if it is an approved business cases with start date, expected completion date and full analyses.

Response No. 2:

- (a) The status of the business case is approved. All additional analyses are attached as Attachment 1. An updated schedule is attached as Attachment 2.
- (b) The start date of the project was 12/4/03 and completion is scheduled for May 2004.

Prepared By: David L. Hooper
Sponsored By: David L. Hooper
Jeffrey L. Laine

Title: Mgr. Customer Svcs. I
Title: Mgr. Customer Svcs. I
Dir. Customer Choice Ops.

Load Research Analysis Preliminary Plan for MACSS Bill Estimation Improvement

Load Research Analysis has preliminarily evaluated the existing bill estimation routines and tested several scenarios on large sets of customer usage histories. From what has been learned so far, we are pursuing the path described below:

1.) Estimation improvement for customers with little or no response to weather:

It appears that the addition of a median calculation to the existing MACSS routines will provide improvement on a significant number of estimates. We are comparing the accuracy of the median against the current MACSS estimation routine. We expect that the median algorithm could simply be added to the existing estimation algorithm, and where the median proves to be a better predictor of the prior month than the existing MACSS routines, the use of the median as the estimate. The value of this approach lies in its ability to exclude unusually high or unusually low historical values from affecting the usage estimate. Still to be determined is the best period over which to calculate the median, and the procedure to identify the customers to whom it is best applied. Since this is simply an addition to the existing MACSS routines, it should be easy to implement and would not be expected to cause significant adverse effects on estimations. This analysis should be completed by January 15, 2004

2.) Estimation improvement for weather sensitive customers.

The approach we are following first categorizes each customer as to its weather sensitive category and calculates a base load for each customer. This approach will require that one alpha field (category) and one numeric field (base load) get added to MACSS for each customer, as well as any fields needed to map a customer to a particular set of weather data. Once the customers are classified into groups, a longitudinal regression analysis will be performed on each group to derive the weather responsiveness coefficient of the group. The longitudinal regression provides a larger number of observations from which to determine the appropriate coefficients, as compared to an attempt to run a linear regression for each customer. The resulting coefficients will represent the additional amount of energy used per heating/cooling degree day (HDD/CDD). We will need a table added to MACSS to hold the coefficients of each group. A usage for any individual customer billing period can then be calculated by applying the derived coefficient to the number of heating/cooling degree days in the billing period, and then adding the customer's base usage. The determination of the category definitions and the number of groups will come from the data analysis. We expect to end up with groups corresponding to low/medium/high HDD and CDD sensitivity, with potential geographic differentiation as well. We expect that we will want to update the customer classification, base load calculations, and HDD/CDD coefficients once or twice each year. This effort has begun in January. It is a very data intensive effort, and requires multiple iterations to determine the proper classifications to be used. We have targeted March 19 for the completion of this phase of the project. If this analysis produces the expected results, implementation of this process should be fairly easy, as MACSS will not be required to perform any complicated algorithms in a production environment.

Attached is an updated timeline for the project to use Weather Data in MACSS for Estimations (Remedy Ticket 732524).

This project is a combined effort between MACSS and Load Research. Alan Graves' group is responsible for developing the new estimating algorithms that will utilize heating and cooling degree day information. The overall completion date for the project is dependent on the Load Research analysis being complete by mid March.

The project has been accelerated to have an overall completion date in May. There will also be two early deliverables in the February to March timeframe. There are two primary reasons for the project being able to be accelerated:

- 1) We were able to cut 6 weeks of programming effort from the original project completion date of June 30th. This was based on several joint development sessions between MACSS and Load Research looking for ways to shortcut the process without sacrificing functionality.
- 2) The majority of the schedule acceleration was due to a reduction in the length of time to monitor these formulas against the current estimating formulas before they are turned on for production estimating purposes. Based on the Load Research analysis, pre-determined benchmarks will be available that the new formulas should be able to match. Monitoring the formulas for a couple weeks should give a good indication that they will be ready for production estimating purposes.

As noted the project now has three deliverables:

- 1) Update current estimating routines with a Median Estimate algorithm (Target end of February)
- 2) Load weather tables and create a conversation to help explain changes in consumption (Target end of March)
- 3) Create new estimating algorithms that will incorporate using degree days (Target is May 15th which will be followed by a couple weeks of monitoring before production implementation)

It should be noted that the new estimating algorithms which will incorporate using degree days are expected to show the best results during the heating and cooling seasons. Under the revised schedule, the new formulas will be available for the peak summer season.

Use Weather in MACSS Estimations Project Plan

Task ID	PHASE DESCRIPTION	START DATE	END DATE	ASSIGNED	Dsgn	Code	Test	COMMENTS
Current Formula Evaluation								
		12/4/2003	1/30/2004					
1	Create Web Site to evaluate current Est formulas	9/1/2003	9/30/2003	Van Tassel	CP	CP	CP	
2	Correct Web Site Low Usage Estimates Tracking	12/4/2003	12/31/2003	Van Tassel	CP	CP	CP	
3	Design fix for Low Usage Est using median Estimates	12/4/2003	12/31/2003	Norman	CP	NA	NA	
4	Verify & Document median Estiamte Approach	12/15/2004	1/15/2004	Norman	CP	NA	NA	
5	Identify DB changes required for report tracking	1/2/2004	1/15/2004	Van Tassel	CP	CP	CP	
6	Program changes for Median Usage Estimates	1/2/2004	1/15/2004	Hartley	CP	IP		
7	Program tracking summary table update	1/9/2004	1/30/2004	Hartley				
8	Program tracking detail table update	1/9/2004	1/30/2004	Hartley				
9	Modify estimate accuracy reporting for new methods	1/15/2004	1/30/2004	Van Tassel				
10	Assist Wayne Pugh in using reporting Web Site	1/15/2004	1/30/2004	Harbour				
11	Track Median Estimate Formula Performance	2/1/2004	2/13/2004	Harbour				
12	Implement Median Estimate for Prod Est Purposes	2/13/2004	2/20/2004	Hartley				
Create Tables / Load Tables / Update Conv								
		1/2/2004	3/31/2004					
Create Tables								
1	Update keys for MCS_DEGR_DAYS_ESTM Table	1/2/2004	1/15/2004	Hartley	CP	CP	CP	Regl & Normal Deg Days loaded into same Tables
2	Update keys for MCS_TEMPERATURE Table	1/2/2004	1/15/2004	Hartley	CP	CP	CP	
Load Tables								
3	Update weather station mapping data into codes tables	12/4/2003	12/31/2003	Harbour	IP	NA	NA	
4	Create a procedure to load EarthSat data automatically	1/2/2004	2/13/2004	Van Tassel	IP			Currently received in an EMAIL daily (daily tbl)
5	Create extract to load weath hist into TEMPER TBL	1/2/2004	2/13/2004	Norman				2 years of historical data should be loaded
6	Update (or create) utility to accumulate data by cycle	1/20/2004	2/28/2004	PIT Team				To load into the MCS Temperature Table
7	Implement weather data in production (For screens)	2/20/2004	2/28/2004	Hartley				
8	Automate daily load of weather data	2/16/2004	2/28/2004	Van Tassel				Currently received in an EMAIL daily (daily tbl)
Update Conversation								
9	Design MACSS Conv to display Weather Data	1/2/2004	1/30/2004	Harbour				Phone Center contact is Cathy Cormany
10	Code MACSS Conv to display Weather Data	2/2/2004	2/28/2004	Hartley				
11	Test MACSS Conv to display Weather Data	3/1/2004	3/31/2004	Hartley				
Program Degree Day Feeds								
		1/2/2004	5/5/2004					
External process to identify Deg Day Accts-								
1	Add MACSS DB changes req for Degree Day accts	1/21/2004	3/19/2004	Van Tassel				
2	Develop external process to identify Degree Day accts	1/21/2004	2/28/2004	Norman				Would take the complexity out of MACSS
3	Review MACSS usage extract reqs for Matt's process	3/1/2004	3/15/2004	Van Tassel				
4	Create usage extract utility from MACSS	3/15/2004	3/31/2004	Van Tassel				

SOAH DOCKET NO. 473-04-1033
PUC Docket No. 28840
CITIES' 35th, Q. # 2
ATTACHMENT 2
Page 2 of 3

Use Weather in MACSS Estimations Project Plan

[illegible]

**SOAH DOCKET NO. 473-04-1033
PUC DOCKET NO. 28840**

APPLICATION OF AEP TEXAS	§	
	§	BEFORE THE STATE OFFICE
	§	
CENTRAL COMPANY FOR	§	OF
	§	
AUTHORITY TO CHANGE RATES	§	ADMINISTRATIVE HEARINGS

**AEP TEXAS CENTRAL COMPANY'S RESPONSE TO
CITIES' THIRTY-FIFTH REQUEST FOR INFORMATION**

Question No. 3:

Follow up to Response to Cities 15th, Q no. 17 (d)(3):

Please explain why TCC does not have sufficient information to provide the requested data from January 2002 through November 2002.

Response No. 3:

TCC does not have sufficient information to respond to the exact request made in Cities' Fifteenth Request for Information, Question No. 17(d)(3) because the usage transactions are not separately tracked by estimated versus actual usage meter reads. However, the monthly percentages of estimated meter reads by class are provided in response to Cities' Fifteenth Request for Information, Question No. 1.

Prepared By: Frederick R. Strauss
Sponsored By: Jeffry L. Laine

Title: Sr. Restructuring Process Cnslt.
Title: Dir. Customer Choice Ops.

**SOAH DOCKET NO. 473-04-1033
PUC DOCKET NO. 28840**

APPLICATION OF AEP TEXAS	§	
	§	BEFORE THE STATE OFFICE
	§	
CENTRAL COMPANY FOR	§	OF
	§	
AUTHORITY TO CHANGE RATES	§	ADMINISTRATIVE HEARINGS

**AEP TEXAS CENTRAL COMPANY'S RESPONSE TO
CITIES' THIRTY-FIFTH REQUEST FOR INFORMATION**

Question No. 4:

Follow up to Response to Cities 15th, Q no. 17 Attachment 4

- (a) Given that data for the December 02-April 03 period has a markedly different characteristics than the subsequent data and given that the subsequent data shows continual improvement in tightening of the frequency distribution toward protocol:
- (b) Please explain the processes employed which result in the significant improvement in (a) meeting protocol and (b) eliminating the extended "tails" or extremely long business days to send out 867_3 observed in the data December 02-April 03.

Response No. 4:

Generally, electric usage information is transmitted by TCC to the appropriate REP at the time a meter is read unless the REP of record is not known. "Rep of Record not known" means TCC has not received the applicable EDI transaction that initiates the REPs liability for the ESID. Then it will be transmitted once the REP of record has been identified. An inability to identify the REP of record is a major cause of TCC's inability to meet protocol and the extend "tails" referenced in the question.

The data subsequent to April 2003 indicates a significant improvement in meeting protocol and eliminating the referenced "tails" when compared with the data from December 2002 to April 2003 for the following reasons:

1. Beginning in December 2002, ERCOT altered the manner in which it processes move-in and move-out transactions. Prior to December 2002, ERCOT simply passed along all the information it received from a REP regarding move-out, move-in and switch information to the transmission and distribution service provider (TDSP) without properly sequencing the transactions. This meant, for example, that ERCOT often passed along out of sequence transaction information to TCC. TCC systems cannot automatically process an out of sequence

transaction (e.g., one in which the requested move-in date predated the date of a completed move-in or move-out). As a result, TCC had to manually process these types of transactions. This often involved a confirmation that the REP still wanted the transaction completed. Or, in the alternative, the transaction was often cancelled based on information obtained from another REP or another transaction from the same REP. It often took time for the REPs to research and respond to these inquiries. Also, it often took additional time for TCC to manually complete and either cancel or rebill the transaction. This often lengthened the time it took for TCC to identify the REP of record and transmit electric usage information. Once ERCOT began to accept only properly sequenced transaction information in December 2002, it shortened the referenced "tails" because the transaction then processed through normal channels and did not require manual intervention to complete the order and generate the 867_03.

The referenced "tails" do not reflect when the meter was actually read by TCC nor TCC's inability to send out the customer usage information on a timely basis. The existence of these "tails" indicate that, due to market clean-up efforts in aligning ESI IDs with REPs, it was frequently a long time period before TCC was able to send customer usage information to the appropriate REP. The "tails" also include the effects of any resending of the customer usage information upon request by ERCOT or the REP after the read date. Finally, the "tails" reflect cancel/rebill situations long after the initial read date.

2. In addition, progress made in 2003 in transaction cleanup activities as well as the overall market synchronization processes helped to eliminate conflicting records. Ultimately this enabled more timely transmittal of usage information in 2003 than in 2002.

Prepared By: Frederick R. Strauss
Sponsored By: Jeffry L. Laine

Title: Sr. Restructuring Process Cnslt.
Title: Dir. Customer Choice Ops.