ENCLOSURE (1)

Engineering Report CCN-IR-08001, "Allowed Outage Time (AOT) Justification Report, Appendix K Uprate Project," Revision 0

Calvert Cliffs Nuclear Power Plant, Inc.
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Engineering Report CCN-IR-08001, Revision 0

Allowed Outage Time (AOT) Justification Report

Appendix K Uprate Project

Revision 0

Prepared for:

CONSTELLATION NUCLEAR

CALVERT CLIFFS NUCLEAR POWER PLANT

Performed By:

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1.0 EXECUTIVE SUMMARY

CCNPP will be installing new Caldon Ultrasonic Flow measurement systems, which will significantly increase the accuracy of the Secondary Calorimetric computation of reactor power. For ECCS Evaluation Models, 10CFR50, Appendix K assumes the plant has been operating continuously at 1.02 times the licensed power level to account for such uncertainties as instrument error. A more accurate Secondary Calorimetric calculation assures that the plant is operating at a significantly lower power level. This difference can be used to justify a small power uprate. CCNPP is currently pursuing approval of such an uprate.

Operationally, the new Caldon FW Flow instrumentation augments (by use of a calculated Correction Factor) the performance of the existing conventional venturi-based FW Flow instrumentation that ultimately provides the FW Flow input to the plant computer for the Secondary Calorimetric calculation.

Once the use of the new Caldon FW Flow instruments has been fully implemented and once operation at post uprate power level commences, the plant must be aware and implement new administrative controls to ensure the power uprate bases are not compromised. If the plant is operating at post uprate power levels and a Caldon FW Flow measurement system fails or otherwise malfunctions, a carefully thought out course of action should be in place.

One option would be to reduce power and continue operation at the pre-uprate licensed power level. This option would be conservative, but costly it terms of lost generation. Another option would be to provide a sound justification for continuing operation at the post uprate power level for a short period of time until the malfunctioning equipment can be returned to service. It is the purpose of this evaluation document to provide the sound justification required to implement this second option.

This evaluation performs a justification to demonstrate that plant operation at the uprate power level can continue for an Allowed Outage Time (AOT) of up to 72 hours following the failure of a Caldon FW Flow measurement system without compromising nuclear safety. This justification is based on a drift analysis for the differential pressure transmitters, as applied to a 72 hour period and a stability analysis of the venturi-based signals when compared to currently installed AMAG Ultrasonic Flow Meters (UFMs).

The bounding drift for the differential pressure transmitters for a 72 hour period has been determined to be ± 0.0206% Span. Using conservative assumptions in quantifying this error for its impact on the Secondary Calorimetric Power Computation, two computations are produced. If both indications exhibit the 72 hour drift in the same direction at the same time, the error is shown to be -0.34 MWth. If the indications drift randomly, the error limit is shown to be -0.24 MWth.

Based on a comparison of the AMAG UFM flow indications and the venturi-based flow indications,

- It is observed that the instantaneous readings from the venturi-based flow signals are more stable than the instantaneous AMAG UFM flow signals.
- The lost accuracy of the venturi-based flow signal due to the loss of the UFMs to provide a correction factor is less than 1/10th the total accuracy of the secondary calorimetric uncertainty. Since this lost accuracy increases the overall uncertainty of the Secondary Calorimetric computation by less than 0.5% of the original Secondary Calorimetric uncertainty of 0.4% RTP, this lost accuracy can be considered negligible.

Notes:

1. The computations are performed for up to 4 days (96 hours) at a time, instead of 72 hours. Thus, it is concluded that this stability analysis could apply for significantly longer times, but 72 hours is considered to be appropriate.
2. This "lost accuracy" value conservatively includes 1) the AMAG Ultrasonic Flow Meters and associated plant computer indications, 2) process noise and fluctuations, 3) venturis, and 4) flow transmitters and associated plant computer indications. Therefore, the term computed herein is NOT comparable with transmitter drift, and is not intended to be construed as such.

2.0 INTRODUCTION / BACKGROUND

Calvert Cliffs Nuclear Power Plant (CCNPP) will install Caldon Ultrasonic Feedwater Flow measurement systems in both Units 1 and Unit 2 to provide a more accurate indication of Feedwater Flow. The Caldon Ultrasonic Flow Meter (UFM) signals are used to normalize the signals from the Differential Pressure (ΔP) based Feedwater (FW) Flow loops to the more accurate Caldon indications. The net result is that the accuracy of the FW Flow input to the plants' secondary calorimetric calculations is much more accurate, which results in a much more accurate Secondary Calorimetric Power calculation in the plant computer. CCNPP is using this more accurate power calculation as the basis for an "Appendix K" Power Uprate. Appendix K to 10CFR50 makes a ±2% Reactor Power allowance for the accuracy of the plants' Secondary Calorimetric Power calculation. Such calculations based on Caldon LEFM CheckPlus based FW Flow signals can achieve a much more accurate Secondary Calorimetric power calculation result, typically ~±0.4%. Plants can opt to use the accuracy gain (~±1.6%) to add margin to safety analyses, or they can justify plant operation at a slightly higher power level without exceeding safety analysis considerations. Like most plants, CCNPP is pursuing a small power uprate.

With the power uprate comes the need to perform or revise a formal calculation to quantify the total uncertainty of the plant's Secondary Calorimetric calculation in the plant computer. To that end, CCNPP calculation CA06945 (Reference 8.1) will determine the post uprate uncertainty associated with the Secondary Calorimetric calculation. The details of this calculation are still in development, over the course of the project.

Previously, CCNPP had planned to implement this power uprate, using AMAG UFMs, as opposed to Caldon UFMs. The equipment for this modification was purchased and installed. The AMAG FW Flow instrumentation has been installed since summer of 2003. Allowing time for startup and implementation of the new system, CCNPP has several years of operation with the AMAGs in service, but not being specifically used in the secondary calorimetric power computation. This installation gives CCNPP an advantage over other plants, in that it provides a baseline for evaluation of the existing venturi-based instrumentation. Plant performance monitoring software has provided a significant amount of data that is used in the preparation of this report. This data will be used to support conclusions and recommendations of this document.

One aspect that must be considered once the power uprate and full use of the Caldon FW Flow instrumentation are implemented is a new potential impact to plant operation. When the Caldon Ultrasonic FW flow monitoring system is in service and providing input for determination of CF, the impact of the failure of a Caldon FW Flow monitor must be evaluated. As the accuracy of the Caldon FW Flow monitors is the basis for the power uprate, directions on how to proceed upon loss of the Caldon FW Flow monitors must be clear, well thought out in advance, and based on sound judgment.

One approach is to immediately lower reactor power to the operating limits that were in place prior to the power uprate. Continued plant operation using this approach (until the Caldon FW Flow monitors could be returned to service) would be conservative and safe from a nuclear safety perspective. This approach would, however, be costly from an economic perspective.

Another approach is to establish an interval of time during which operation at the uprate power level could continue. This would allow a set time interval to return the Caldon FW Flow monitors to service before a reduction to "pre-uprate" operating power limit would be required, to preserve all nuclear safety considerations (requirements / assumptions). This approach would be much more cost effective, but would require sound basis to show that nuclear safety considerations are preserved. This is the selected approach, and it is the purpose of this document to provide the justification required to continue operation at post uprate power level upon failure of a Caldon FW Flow monitoring system.

The basis of the justification comes partly from the approach taken from a NRC Safety Evaluation Report for Vogtle for the same type project, and partially from analysis of stability of the venturi-based FW Flow monitoring system, based on comparison to currently installed AMAG UFMs.

3.0 SCOPE

The scope of this document is the venturi-based FW Flow monitoring instrumentation signals to the plant computer.

4.0 METHODOLOGY

The methodology for justifying continued operation at post uprate power levels following failure of the Caldon Ultrasonic FW Flow monitoring instrumentation is generally described below. The detailed methodology and analysis is included in Appendices A and B.

General Methodology

In general a two part methodology is employed for justification of an Allowed Outage Time. The two analyses performed are 1) a drift analysis of FW Flow transmitters and 2) an operating comparison of venturi-based FW Flow indications to AMAG Ultrasonic Flow Meter indications.

First, similar to the methodology shown within the Vogtle SER (dated February 27, 2008), a drift analysis is performed for the Feedwater Flow transmitters, per Appendix A to this report. This methodology is generally based on EPRI TR-103335, Revision 1, and is detailed within Appendix A. Since the required calibration interval for the transmitters is 24 months, the drift analysis is performed for that time period. The drift values are then interpolated (conservatively using SRSS) to a 72 hour period, to correspond to the recommended AOT interval.

Once the drift for 72 hours is determined, two computations are performed. First, the impact upon the Secondary Calorimetric reactor power computation is performed, assuming that both transmitters drift in the same direction at the same time, to the 72 hour drift limit. Second, the same impact is determined, assuming random variation of the transmitters, with 72 hour two-sigma limits.

The second activity to be performed in this justification is to perform an operating comparison of venturi-based FW Flow indications to AMAG Ultrasonic Flow Meter indications. This analysis is performed within Appendix B to this study, and the detailed methodology is contained therein.

Plant computer data was supplied for the venturi-based flow indications, the AMAG instantaneous flow indications, and the Correction Factors which are computed by a ratio of these values. Plant data was analyzed for both headers, in both units, for five day intervals in 2007 and 2008.

At relatively steady state conditions, AMAG can be used for trending, when averaged over time, but can vary significantly over short time intervals. In accordance with the previous design (AMAG), correction factors were planned to be implemented hourly to the venturi-based flow signal, based on the rolling, most recent, 24 hours average correction factor, as computed continuously from comparison to the AMAG signals. This approach is used in the analysis of the historical data, to determine the "lost accuracy" in the uncorrected venturi-based flow signal over the AOT interval.

5.0 ASSUMPTIONS / GIVENS

The assumptions for this analysis are contained within Appendices A and B for the specific analyses therein. These assumptions are repeated here for completeness.

From Appendix A,

1. This drift report employs those assumptions customarily used for standard statistical analyses, such as the assumption that a distribution is normal and the use of statistical tests to confirm this hypothesis.
2. In order to convert the drift values to units of % Rated Thermal Power, the nominal flow rates must be used. The estimated nominal flow rates for the post-uprate condition are 5932 to 6178 klbm/hr per steam generator. The lower rate of 5932 klbm/hr is used to convert the drift values, since this will produce a conservatively larger error term when the conversion is made.
3. In order to convert the drift values to units of % Rated Thermal Power, it is conservatively assumed that FW flow is a 1:1 contributor to the secondary calorimetric power computation. This allows the computed % Flow error to be converted to % RTP error simply by multiplying by 1. This is conservative, since other error contributors exist, which affects the power computation; and therefore, the actual conversion factor is slightly less than 1.

4. In order to compute the overall impact of the drift on the secondary power calorimetric computation, it is assumed that FW flow is equally split between the steam generators. This should be the case during normal operation, and minor differences will not impact the results of this calculation.
5. In order to compute the overall impact of the drift on the secondary power calorimetric computation, it is conservatively assumed that a 1.6% uprate is achieved per this uprate, which would amount to 2743.2 MWth. For conservatism, the thermal power is assumed to be a total of 2744 MWth for this analysis.

From Appendix B,

1. At relatively steady state conditions, AMAG can be used for trending, when averaged over time, but can vary significantly over short time intervals. This is due to the inherent operation of the AMAG devices. Other sources of variation in both the venturi-based FW flow signals and the AMAG signals could include process variations in Feedwater Flow and noise.
2. During the planning for the AMAG UFMs (before the change in design to the Caldon UFMs), correction factors were planned to be implemented hourly to the venturi-based flow signal, based on the rolling, most recent, 24 hours average correction factor, as computed continuously from comparison to the AMAG signals. This approach was based on smoothing the variation in the AMAG signals and ensuring that the average outputs of the venturis match the average output from the UFMs.
3. It is assumed that the flow rates from each generator are approximately the same. This allows the correction factors to be averaged for the two generators, in determining the total flow rate for its impact on the power measurement.
4. It is conservatively assumed that FW flow is a 1:1 contributor to the secondary calorimetric power computation, such that the computed % Flow error can be converted to % RTP error simply by multiplying by 1. This is conservative, since other error contributors exist, which affects the power computation; and therefore, the actual conversion factor is slightly less than 1.
5. The final overall accuracy of the secondary calorimetric computation of reactor power is conservatively estimated to be approximately 0.4% RTP (or very slightly less), thus allowing a potential 1.6% power uprate. This is conservative, since it provides a total power error less than the currently computed value. The smaller the total uncertainty value, the larger the lost accuracy will show in the comparison.

6.0 RESULTS

Per Appendix A, the bounding drift for the differential pressure transmitters for a 72 hour period has been determined to be ± 0.0206% Span. Using conservative assumptions in quantifying this error for its impact on the Secondary Calorimetric Power Computation, two computations are produced. If both indications exhibit the 72 hour drift in the same direction at the same time, the error limit is shown to be -0.34 MWth. If the indications drift randomly, the error limit is shown to be -0.24 MWth.

Per Appendix B, based on a comparison of the AMAG UFM flow indications and the venturi-based flow indications,

- It is observed that the instantaneous readings from the venturi-based flow signals are more stable than the instantaneous AMAG UFM flow signals.
- The lost accuracy of the venturi-based flow signal due to the loss of the UFMs to provide a correction factor is less than 1/10th the total accuracy of the secondary calorimetric uncertainty. Since this lost accuracy increases the overall uncertainty of the Secondary Calorimetric computation by less than 0.5% of the original Secondary Calorimetric uncertainty of 0.4% RTP, this lost accuracy can be considered negligible.

Notes:

1. The computations are performed for up to 4 days (96 hours) at a time, instead of 72 hours. Thus, it is concluded that this stability analysis could apply for significantly longer times, but 72 hours is considered to be appropriate.
2. This "lost accuracy" value conservatively includes 1) the AMAG Ultrasonic Flow Meters and associated plant computer indications, 2) process noise and fluctuations, 3) venturis, and 4) flow transmitters and associated plant computer indications. Therefore, the term computed herein is NOT comparable with transmitter drift, and is not intended to be construed as such.

7.0 CONCLUSIONS / RECOMMENDATIONS

Based on the fact that the drift of the FW Flow transmitters is shown to be very small for a 72 hour interval, and the fact that the venturi-based flow indications are very stable and introduce a negligible additional uncertainty into the Secondary Calorimetric power computation for a 4 day study, it is recommended that the Allowed Outage Time for the Caldon Ultrasonic FW Flow monitoring system be set to 72 hours.

8.0 REFERENCES

8.1 ANSI/ISA-S67.04-Part I-2000, "Setpoints for Nuclear Safety Related Instrumentation"

8.2 ISA-RP67.04-Part II-2000, "Methodologies for the Determination of Setpoints for Nuclear Safety-Related Instrumentation," Second Printing, June 12, 1995

8.3 EPRI TR-103335R1, "Statistical Analysis of Instrument Calibration Data; Guidelines for Instrument Calibration Extension / Reduction Programs," October, 1998

8.4 DOE Research and Development Report No. WAPD-TM-1292, "Statistics for Nuclear Engineers and Scientists Part 1: Basic Statistical Inference," February 1981

8.5 NRC Generic Letter 91-04, "Changes in Technical Specification Surveillance Requirements to Accommodate a 24 Month Fuel Cycle," April 2, 1991

8.6 American National Standard N15.15-1974, "Assessment of the Assumption of Normality (Employing Individual Observed Values)"

8.7 Plant Performance Data (provided on electronic media)

PREPARATION / REVIEW

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Attachment 1 (Drift Analysis Detailed Computations) 22 pages

1 Purpose/Objective

1.1 The purpose of this analysis is to establish realistic drift values and characteristics for the Feedwater Flow transmitters, used with venturis, for backup instrumentation for Ultrasonic Flow Meters (UFMs) at Calvert Cliffs Nuclear Power Plant. The drift values are determined by historical As Found / As Left data analysis. The drift values may be used for instrument uncertainty analysis and determination of an Acceptable Outage Time (AOT) for the Ultrasonic Flow Meters, to be used in Technical Specifications.

1.2 Specifically, this analysis addresses Rosemount 3051CD4 series differential pressure transmitters with tag numbers as shown in Table 1.2-1 below.

TABLE 1.2-1
COMPONENT LIST

CALIBRATION PROCEDURE NO.	TAG NO.	FUNCTION
I-60-1 I-60-1, FTI-104 I-60-1, FTI-104 I-60-1, FTI-565, FTI-104 I-60-2, FTI-104, I-535-2 I-60-2, FTI-104 I-60-2, FTI-104 I-60-2, FTI-104	1-FT-1111 1-FT-1111A 1-FT-1121 1-FT-1121A 2-FT-1111 2-FT-1111A 2-FT-1121 2-FT-1121A	Feedwater Flow Transmitters

2 Methodology and Acceptance Criteria

2.1 The methodology used for this analysis is in general accordance with Reference 3.1.3, using References 3.1.1, 3.1.2 and 3.1.6 to supplement. An overview of the methodology is given herein, and any supplemental methods used herein are described.

2.2 This analysis determines the drift values for the subject instrumentation by analysis of historical As Found / As Left data from calibration records. Drift for a given device for a calibration period is determined by subtracting the previous As Left setting from a more recent As Found setting. The time interval for that calibration period is determined by subtracting the previous date from the more recent date, in units of days. All retrievable As Left and As Found data is collected for each calibration performed on each device covered by this report, for the study period. From this information, the drift and calibration interval is generated for each possible instance. The goal is to collect enough data for the instrument or group to make a statistically valid pool. The devices covered by this report are currently calibrated on a 24 Month basis. A sufficient number of valid drift values are provided as a result of the selected study period to make a statistically valid pool (considered to be greater than 30 drift values). Therefore, As Found and As Left Data values are entered from calibrations occurring for approximately the last 10 to 12 years. For certain transmitters, data was only available through approximately the year 2000. All retrievable data for the subject transmitters within the study period was used in this drift analysis.

2.3 For the Feedwater Flow transmitters, the transmitters are calibrated at multiple calibration points across the span of the instrument. However, the drift data is only required to be developed for the situation of approximately 100% power. At approximately 100% power, Feedwater Flow is estimated to be between 5932 and 6178 klbm/hr, which corresponds to approximately 83% and 90% of transmitter span. The transmitters are calibrated at multiple calibration points, including points at approximately 80% and 100% of transmitter span. These calibration points lie above and below the projected Feedwater Flow values at 100% power operation, after the uprate. Therefore, these two calibration points are used for the drift analysis, and the worst case data of the two calibration points will be used to determine the transmitter analyzed drift.

2.4 Determination of the Analyzed Drift is generally accomplished through the following steps.

2.4.1 Gather and Generate Raw Drift Data: In addition to gathering the As Found and As Left data and computing the drift values and time intervals, this step involves careful screening of the input data for errors or other situations that would not allow proper determination of drift. Since all of the transmitters are the same manufacturer and model number, are used in the same application, and are calibrated to approximately the same span, no specific tests are required to prove that all data from these transmitters should be pooled for analysis.

2.4.2 Determination of Outliers and Statistical Summary: In order to properly model the drift characteristics for a device, it could be proper to remove outliers, which obviously do not conform to the vast majority of the data. A t-Test is performed on the data to detect any outliers, per the guidelines of Reference 3.1.3, and remove

them, if appropriate. (Only one outlier is removed from this analysis for a given calibration point.) Additionally, the basic statistical values which describe the group of drift data are derived in this step, including such parameters as Mean, Standard Deviation, Count, Median, Minimum, Maximum, etc. Finally, within this step, since two calibration data points are analyzed, the drift statistics from each of the calibration points are compared to choose the worst-case for establishment of the Analyzed Drift (DA) value. The remainder of the drift analysis is based on the drift data from that worst-case calibration point. The worst-case calibration point is determined by choosing the point with the largest quantity, [2 x StDev + Absolute Value (Mean)].

2.4.3 Tests for Normality: Per Reference 3.1.6, a statistical test (W or D-Prime, depending on sample size) is performed on the drift data to support the hypothesis that the data conforms to a normal distribution. If this test is unable to support that hypothesis, then a Coverage Analysis is performed to ensure that the data can be conservatively modeled by a normal distribution and to provide an adjustment to the standard deviation of the drift model, if necessary to conservatively envelop the observed data population. This Coverage Analysis involves the use of a Normality Adjustment Factor (NAF), used for multiplication of the standard deviation, to provide a normal distribution model which envelops the data population.

2.4.4 Scatter Plot: A Scatter Plot is developed for the data, per Reference 3.1.3, for information. This plot helps in understanding the drift data.

2.4.5 Time Binning Analysis: A time binning analysis is performed on the data to provide information regarding drift values with varying observed calibration intervals. The test consists simply of segregating the drift data into different groups (Bins) corresponding to different ranges of calibration or surveillance intervals and comparing the standard deviations and means for the data in the various groups. The purpose of this type of analysis is to determine if the standard deviation or mean tends to become larger as the time interval between calibrations increases. Data is split into natural breaks, which would align with monthly, quarterly, semi-annual, annual, 18-Month, 24-Month, and greater surveillance intervals. The maximums of each of these bins are shown in the table of page 20 of Attachment 1. Since it was found that no bins other than Bin 6 (the 24 Month surveillance bin) contain more than 5 data values or more than 10% of the data population, it is concluded that only one bin has enough population to make meaningful conclusions on. Therefore, time dependency cannot be performed on the drift data. The standard deviation and mean of the data within Bin 6 will be considered in addition to the overall mean and standard deviation of the entire data set.

2.4.6 Analyzed Drift Derivation and Characterization: The drift values are determined for the current calibration interval. The mean of the data is computed as the drift bias, and the random term is computed as follows:

$$\text{Drift}_{\text{Random}} = \pm \text{TIF} \times \text{Std Dev} \times \text{NAF}$$

Where: TIF = Tolerance Interval Factor for 95/95 Probability / Confidence for the Sample Size
Std Dev = Standard Deviation
NAF = Normality Adjustment Factor (Step 2.4.3)

2.5 The mathematical computations of the statistical analysis are performed within an Excel spreadsheet. Supporting information from the spreadsheet is printed out in the form of Attachment 1 to this analysis. Microsoft Excel spreadsheets generally compute values to an approximate 15 decimal resolution, which is well beyond any required rounding for engineering analyses. However, for printing and display purposes, most values are displayed to lesser resolution. It is possible that hand computations will produce slightly different results, because of using rounded numbers in initial and intermediate steps, but the Excel computed values are considered highly accurate in comparison.

2.6 Acceptance Criteria: Since the purpose of the analysis is to generate a value and description of the characteristics of the drift of the evaluated make/model, there are no specific acceptance criteria.

3 References

3.1 METHODOLOGY

3.1.1 ANSI/ISA-S67.04-Part I-2000, "Setpoints for Nuclear Safety Related Instrumentation"

3.1.2 ISA-RP67.04-Part II-2000, "Methodologies for the Determination of Setpoints for Nuclear Safety-Related Instrumentation," Second Printing, June 12, 1995

3.1.3 EPRI TR-103335R1, "Statistical Analysis of Instrument Calibration Data; Guidelines for Instrument Calibration Extension / Reduction Programs," October, 1998

3.1.4 DOE Research and Development Report No. WAPD-TM-1292, "Statistics for Nuclear Engineers and Scientists Part 1: Basic Statistical Inference," February 1981

3.1.5 NRC Generic Letter 91-04, "Changes in Technical Specification Surveillance Requirements to Accommodate a 24 Month Fuel Cycle," April 2, 1991

3.1.6 American National Standard N15.15-1974, "Assessment of the Assumption of Normality (Employing Individual Observed Values)"

3.2 PROCEDURES

3.2.1 Historical Records from Calvert Cliffs Surveillance Test Procedures I-60-1, I-60-2, I-535-2, FTI-104, FTI-565, associated with the subject transmitters.

4 Assumptions / Engineering Judgments

4.1 This drift report employs those assumptions customarily used for standard statistical analyses, such as the assumption that a distribution is normal and the use of statistical tests to confirm this hypothesis.

4.2 In order to convert the drift values to units of % Rated Thermal Power, the nominal flow rates must be used. The estimated nominal flow rates for the post-uprate condition are 5932 to 6178 klbm/hr per steam generator. The lower rate of 5932 klbm/hr is used to convert the drift values, since this will produce a conservatively larger error term when the conversion is made.

4.3 In order to convert the drift values to units of % Rated Thermal Power, it is conservatively assumed that FW flow is a 1:1 contributor to the secondary calorimetric power computation. This allows the computed % Flow error to be converted to % RTP error simply by multiplying by 1. This is conservative, since other error contributors exist, which affects the power computation; and therefore, the actual conversion factor is slightly less than 1.

4.4 In order to compute the overall impact of the drift on the secondary power calorimetric computation, it is assumed that FW flow is equally split between the steam generators. This should be the case during normal operation, and minor differences will not impact the results of this calculation.

4.5 In order to compute the overall impact of the drift on the secondary power calorimetric computation, it is conservatively assumed that a 1.6% uprate is achieved per this uprate, which would amount to 2743.2 MWth. For conservatism, the thermal power is assumed to be a total of 2744 MWth for this analysis.

5 Design Inputs

5.1 Pages 1 through 4 of Attachment 1 provide a listing of the historical As Left (AL) and As Found (AF) data, as obtained from Reference 3.2.1, with any data exclusions or modifications noted. All dates of calibration are also entered to provide time intervals between calibrations.

6 Analysis

6.1 Gather and Generate Raw Error Data

6.1.1 Specifically, this analysis addresses Rosemount 3051CD4 Series differential pressure transmitters, with the tag numbers as shown in Table 1.2-1 of this analysis. The transmitters have identical manufacturers, model numbers, calibrated spans, and are used in identical applications and similar environments. Therefore, these devices should perform very similarly, and the data from these instruments can be pooled for analysis, without any specific numerical pooling tests.

6.1.2 Pages 1 through 4 of Attachment 1 provide a listing of the initial As Found and As Left data from available historical plant calibration records for the subject differential pressure transmitters. Note that the calibration dates are also recorded, and notes are provided to clarify the activities performed or to provide additional information about the data, as appropriate. This data was entered into an Excel spreadsheet for computation of the drift values, time intervals between calibrations and statistical analysis. Note that only the 80% and 100% transmitter span values were entered, as explained in Section 2.3.

6.1.3 Data from pages 1 through 4 of Attachment 1 which is excluded from the drift analysis is listed in the table below. Data exclusion is justified based on the following.

Table 6.1.3-1
Data Not Entered in the Drift Analysis

Procedure Number	Tag Number	Surveillance Date(s)	Comments/Disposition
I-60-1	1-FT-1111A	4/30/04	Scaling change for this transmitter for these calibration points. AF data is excluded.
I-60-1	1-FT-1111A	4/12/00	Scaling change for this transmitter for these calibration points. AF data is excluded.
FTI-104	1-FT-1121	2/8/07	Transmitter replaced; AF and AL data recorded after the transmitter was replaced. AF data is excluded.
I-60-1	1-FT-1121A	4/30/04	Scaling change for this transmitter for these calibration points. AF data is excluded.
I-60-1	1-FT-1121A	4/12/00	Scaling change for this transmitter for these calibration points. AF data is excluded.

6.1.4 Pages 5 through 8 of Attachment 1 are used to convert the calibration As Found and As Left data from the original units of mA to units of % Span. The raw data values, as read from pages 1 through 4 of Attachment 1, are directly entered into pages 5 through 8 of Attachment 1. These values are used for the conversion to the new values on pages 5 through 8 of Attachment 1. The raw data is converted to units of % Span, using the equations shown in the column headings.

6.1.5 A screening of the initial input data from pages 1 to 4 of Attachment 1 was performed. To help identify erroneous data, an informal outlier test was performed, with the Critical T values artificially reduced incrementally until approximately 10% of the data population was identified as outliers. Those outliers were researched, and no data errors were revealed. The specific informal T-tests performed are not documented, as they are only used as tools to identify potentially erroneous data and do not contribute to the analysis of the valid data.

6.1.6 Drift is computed by subtracting the As Left data of one calibration from the As Found data of the next calibration, as documented in pages 9 through 11 of Attachment 1. These pages also document the time interval between calibrations (in the number of days and months) by subtracting the As Left date of one calibration from the As Found date of the next calibration. Pages 9 through 11 of Attachment 1 import the Sequence ID, the Tag No., the AF / AL flags, the dates of calibration and the As Found and As Left data from pages 5 through 8 of Attachment 1 and compute the interval between calibrations. Pages 9 and 10 of Attachment 1 compute the drift values and summarize the time intervals computed. As an example of the equations used, the first drift value and time interval are computed as follows. The rest of the values are computed identically.

Drift (Seq 1) = AF (3/5/08) – AL (3/9/06) [For Tag 1-LT-1111]
= 80.12500 (From Seq. 1 on Left) - 80.06250 (From Seq. 4 on Left)
= 0.06250% Span

Cal Interval (Seq 1) = 3/5/08 - 3/9/06
= 727 Days

Cal Interval (Mo.) = Cal Interval (Days) x 12 Months / 365.25 Days
= 23.9 Months

6.2 Determination of Outliers and Statistical Summary

6.2.1 The outlier analysis is recorded on pages 12 and 13 of Attachment 1, in accordance with Section 7.2 of Reference 3.1.3. The critical T value comes directly from Reference 3.1.3. The Final Data Set (FDS) for this analysis is documented in the outlier analysis and is identical to the original data set, except for the removal of a single outlier for Calibration Data Points 1 and 2.

6.2.2 A summary of the required statistical values for each calibration point for the Final Data Set is developed within the outlier analysis on page 13 of Attachment 1. Cell formulas for the determinations of statistical quantities are developed with standard Microsoft Excel functions. The Calibration Data Points are compared by analyzing the "|Mean|+2*Standard Deviation" term. For this set of data, this quantity is largest for Calibration Data Point 2. Therefore, the remainder of the analysis is based on the Final Data Set from Calibration Data Point 2.

6.3 Tests for Normality

6.3.1 Since the FDS contains less than 50 samples, the W Test is performed on the data to test for normality, as shown on page 14 of Attachment 1. The details of the W Test methodology are shown in Reference 3.1.6. Equations used are listed on page 14 of Attachment 1. Since the calculated W statistic (0.9357) is less than the critical value for W (0.942), this test rejects the assumption of normality for this data set.

6.3.2 Since the W test rejected the assumption of normality, a Coverage Analysis is necessary. The Coverage Analysis is performed in accordance with Section C.5 of Reference 3.1.3, and is shown on pages 15 through 18 of Attachment 1. For the Coverage Analysis, a Histogram is developed on pages 15 and 16 of Attachment 1. To generate the histogram data, the drift values are categorized into 12 bins, in relation to the mean and standard deviation. These bins are generated in multiples of ½ Standard Deviation increments, and the bin maximum values are derived in accordance with the methods given in Section C.1 of Reference 3.1.3. (See column headings for specific formulas used for the Maximums.)

As shown on page 15 of Attachment 1, expected numbers of data points within each bin are calculated, assuming that the data is a normal distribution and that the data set is exactly representative of a normal curve. The population percentages within each bin are derived from Table B-2 of Reference 3.1.3. These percentages are then multiplied by the total data population to determine the expected number of values within each bin, for the size of the data set. The observed population within each bin is tabulated and plotted as a bar chart versus the ideal normal curve for comparison.

It is evident from the Histogram that the data reasonably conforms to a normal distribution. It is, however, noted that the actual distribution contains a slightly lower percentage of data within the +/- 2σ limits than an ideal normal distribution. Therefore, the standard deviation is adjusted upward by a Normality Adjustment Factor (NAF) per Section 2.4.3. The NAF is determined iteratively, until the data within the +/- 2σ limits exceeds that of an ideal normal distribution.

The normality adjustment factor, new standard deviation, new bin limits, and new data populations are shown on page 17 of Attachment 1. The new Histogram, showing the new distribution in the model is shown on page 18 of Attachment 1.

Therefore, the data is conservatively modeled as a normal distribution, with the NAF applied.

6.4 Time Dependency

6.4.1 For information only, the drift data is plotted as a scatter plot on page 19 of Attachment 1, in accordance with the methodology of Section D.3.7.3 of Reference 3.1.3.

6.4.2 The binning analysis is performed on page 20 of Attachment 1. The drift and time interval data are divided into bins, based on the intervals between calibrations as defined in Section 2.4.5. Statistical summaries for each bin, including count, mean, standard deviation, mean time interval and maximum observed time interval are computed. Excel functions are used to determine the statistical summary values for each bin. This information is presented on page 20 of Attachment 1. After removing those bins with 5 or less data points and those with less than or equal to 10% of total population, only Bin 6 remains. Therefore, no real information about time dependency can be obtained from this analysis. However, the mean and standard deviation of Bin 6 are considered in addition to the overall mean and standard deviation of the Final Data Set to determine the Analyzed Drift values.

6.5 Analyzed Drift (DA) Derivation and Characterization

6.5.1 As shown on page 21 of Attachment 1, the drift bias error is evaluated for significance. Ratios of the Standard Deviation to the Absolute Value of the mean are obtained for the Final Data Set and for the data within Bin 6 of the time binning analysis. In both cases, the bias term (mean) is less than 1/13 the size of the standard deviation in magnitude. As can be seen in Section 6.5.2 below, the standard deviation is multiplied by factors amounting to significantly more than 2 to obtain the random portion of drift. This makes the bias term less than $1/26^{th}$ the magnitude of the random portion of drift. By engineering judgment, this makes the bias term negligible in comparison to the random portion of drift. Therefore, the bias term is set equal to 0 for this analysis.

6.5.2 The random portion of the Analyzed Drift is determined from multiplying the standard deviation by the Tolerance Interval Factor (TIF) and the Normality Adjustment Factor (NAF). For conservatism, the larger standard deviation of Bin 6 from the time binning analysis is used for this computation. The NAF is determined to be 1.2502, per page 17 of Attachment 1. The TIF is obtained from Table VII (a) of Reference 3.1.4 as 2.445 for a 95/95 significance. The computation of this value is shown on page 21 of Attachment 1 to result in a D_{random} term of ± 0.3216% Span for a nominal calibration interval of 24 Months.

6.5.3 Interpolation of drift specifications or drift analysis results is a controversial subject, but has been used in the justification for Allowed Outage Times (AOT). Two methods for interpolation are generally used, linear or SRSS. For the purposes of interpolation, SRSS methods are more conservative, in that they produce larger final drift results for the shortened time intervals. For application to the AOT for the Ultrasonic Flow Meters (UFMs), the data is conservatively interpolated via the Square Root of the Sum of the Squares (SRSS) method. The proposed nominal AOT for Technical Specifications is 72 hours. Therefore, the drift for the transmitters is interpolated to 72 hours, as shown on page 21 of Attachment 1. This

results in a 72 hour drift value for the transmitters of $D_{random\ (72\ hour)} = \pm 0.0206\%$ Span.

6.5.4 In assessing the impact upon the Secondary Calorimetric computation for reactor power, the drift error must first be converted to units of % Rated Thermal Power (RTP). The conversion is made, based on a nominal flow rate, considered to be equivalent to 100% flow through a steam generator, as shown on page 22 of Attachment 1. Per Assumption 4.2, the lowest expected nominal flow rate of 5932 klbm/hr per steam generator is used for the conversion. The calibrated span for the transmitters is 0 to 6500 klbm/hr; so this flow rate corresponds to 83.2867% DP span of the transmitter, as computed on page 22 of Attachment 1. This output is considered the ideal output for the transmitter at that flow rate.

6.5.5 The Secondary Calorimetric power computation is particularly concerned with errors in measurement which indicate that reactor power is less than it actually is. In this way, operation in accordance with the indication would mean that actual reactor power would be greater than 100% RTP. Therefore, the transmitter error is applied in the negative direction, since the less Feedwater flow indication is, the less indicated reactor power is. The erred output from the transmitter is computed by subtracting the drift error from the ideal output from the transmitter at the analyzed flow rate, as shown on page 22 of Attachment 1. The erred output from the transmitter is converted to the erred indication of flow by squaring the % span transmitter output and multiplying by the span of 6500 klbm/hr.

6.5.6 In accordance with Assumptions 4.3 and 4.4, it is assumed that the flow rate from each steam generator is equally split and that the flow error from each can be converted to % RTP by a 1:1 ratio. The drift value is converted to % RTP as shown on page 22 of Attachment 1.

6.5.7 As shown on page 22 of Attachment 1, two computations of impact on the Secondary Calorimetric reactor power computation are made. The first assumes that the flow indications from each steam generator have the maximum 72 hour drift in the same direction at the same time. The second assumes that the flow indications drift randomly, and thus combine via SRSS combination, instead of addition. Per Assumption 4.5, the total rated thermal power for this analysis is assumed to be 2744 MWth. If both indications exhibit the 72 hour drift in the same direction at the same time, the error is shown to be -0.34 MWth. If the indications drift randomly, the error limit is shown to be -0.24 MWth.

7 Summary and Conclusions

7.1 The bounding Analyzed Drift (D) for the Rosemount 3051CD4 Series differential pressure transmitters (See Table 1.2-1) has been determined to be ± 0.3216% Span for a nominal calibration interval of 24 months, with no significant bias. The Analyzed Drift should be treated as a normally distributed, 2σ value for uncertainty analysis. The bounding Analyzed Drift (D) for these transmitters for a 72 hour period has been determined to be ± 0.0206% Span.

7.2 Using conservative assumptions in quantifying this error for its impact on the Secondary Calorimetric Power Computation, two computations are produced. If both indications exhibit the 72 hour drift in the same direction at the same time, the error limit is shown

to be -0.34 MWth. If the indications drift randomly, the error limit is shown to be -0.24 MWth.

8 Attachment 1 (Spreadsheet) Contents

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Drift Analysis
Rosemount 3051CD4 Series
Differential Pressure Transmitters
Input Data

Instrument / Test Information					Scaling Data			AF/AL Data			
Seq. ID	Tag ID	Date	Surv Test	Make /Model	In/ Out Units	In / Out Pt 1	In / Out Pt 2	AF/AL	AF / AL Pt 1	AF / AL Pt 2	Comments
1	1-FT-1111	3/5/08	I-60-1	Rosemount 3051CD4	PSI	74.42	93.03	AF	16.820	20.000	
2	1-FT-1111	3/5/08	I-60-1	Rosemount 3051CD4	mA	16.80	20.00	AL	16.820	20.000	
3	1-FT-1111	3/9/06	I-60-1	Rosemount 3051CD4	PSI	74.42	93.03	AF	16.810	20.010	
4	1-FT-1111	3/9/06	I-60-1	Rosemount 3051CD4	mA	16.80	20.00	AL	16.810	20.010	
5	1-FT-1111	4/30/04	I-60-1	Rosemount 3051CD4	PSI	74.42	93.03	AF	16.780	20.000	
6	1-FT-1111	4/30/04	I-60-1	Rosemount 3051CD4	mA	16.80	20.00	AL	16.780	20.000	
7	1-FT-1111	4/30/02	I-60-1	Rosemount 3051CD4	PSI	74.42	93.03	AF	16.790	20.000	
8	1-FT-1111	4/30/02	I-60-1	Rosemount 3051CD4	mA	16.80	20.00	AL	16.790	20.000	
9	1-FT-1111	4/12/00	I-60-1	Rosemount 3051CD4	PSI	74.42	93.03	AF	16.759	19.953	
10	1-FT-1111	4/12/00	I-60-1	Rosemount 3051CD4	mA	16.80	20.00	AL	16.792	19.990	
11	1-FT-1111A	3/5/08	I-60-1	Rosemount 3051CD4	PSI	74.42	93.03	AF	16.790	19.990	
12	1-FT-1111A	3/5/08	I-60-1	Rosemount 3051CD4	mA	16.79	19.99	AL	16.790	19.990	
13	1-FT-1111A	3/9/06	I-60-1	Rosemount 3051CD4	PSI	74.42	93.03	AF	16.790	19.990	
14	1-FT-1111A	3/9/06	I-60-1	Rosemount 3051CD4	mA	16.80	20.00	AL	16.790	19.990	
15	1-FT-1111A	4/30/04	I-60-1	Rosemount 3051CD4	PSI	74.42	93.03	AF	EXC	EXC	Scaling change for this transmitter for these calibration points. AF data is excluded.
16	1-FT-1111A	4/30/04	I-60-1	Rosemount 3051CD4	mA	16.80	20.00	AL	16.780	20.000	
17	1-FT-1111A	4/30/02	I-60-1	Rosemount 3051CD4	PSI	75.45	93.15	AF	16.980	20.020	
18	1-FT-1111A	4/30/02	I-60-1	Rosemount 3051CD4	mA	16.96	20.00	AL	16.980	20.020	
19	1-FT-1111A	4/12/00	I-60-1	Rosemount 3051CD4	PSI	75.45	93.15	AF	EXC	EXC	Scaling change for this transmitter for these calibration points. AF data is excluded.
20	1-FT-1111A	4/12/00	I-60-1	Rosemount 3051CD4	mA	16.96	20.00	AL	16.968	20.009	
21	1-FT-1111A	5/12/98	FTI-104	Rosemount 3051CD4	PSI	74.42	93.03	AF	16.800	19.990	
22	1-FT-1111A	5/12/98	FTI-104	Rosemount 3051CD4	mA	16.80	20.00	AL	16.800	19.990	
23	1-FT-1111A	5/17/96	FTI-104	Rosemount 3051CD4	PSI	74.42	93.03	AF	16.800	20.000	
24	1-FT-1111A	5/17/96	FTI-104	Rosemount 3051CD4	mA	16.80	20.00	AL	16.800	20.000	
25	1-FT-1121	3/5/08	I-60-1	Rosemount 3051CD4	PSI	74.50	93.12	AF	16.840	20.040	
26	1-FT-1121	3/5/08	I-60-1	Rosemount 3051CD4	mA	16.83	20.03	AL	16.840	20.040	
27	1-FT-1121	4/23/07	FTI-104	Rosemount 3051CD5	PSI	74.50	93.12	AF	16.900	20.110	
28	1-FT-1121	4/23/07	FTI-104	Rosemount 3051CD6	mA	16.83	20.03	AL	16.840	20.050	
29	1-FT-1121	4/9/07	FTI-104	Rosemount 3051CD7	PSI	74.50	93.12	AF	16.830	20.030	
30	1-FT-1121	4/9/07	FTI-104	Rosemount 3051CD8	mA	16.83	20.03	AL	16.830	20.030	
31	1-FT-1121	3/27/07	FTI-104	Rosemount 3051CD4	PSI	74.50	93.12	AF	16.820	20.030	
32	1-FT-1121	3/27/07	FTI-104	Rosemount 3051CD4	mA	16.83	20.03	AL	16.820	20.030	
33	1-FT-1121	2/8/07	FTI-104	Rosemount 3051CD4	PSI	74.50	93.12	AF	EXC	EXC	Transmitter replaced; AF and AL data recorded after the transmitter was replaced. AF data is excluded.

Instrument / Test Information					Scaling Data			AF/AL Data			
Seq. ID	Tag ID	Date	Surv Test	Make /Model	In/ Out Units	In / Out Pt 1	In / Out Pt 2	AF/AL	AF / AL Pt 1	AF / AL Pt 2	Comments
34	1-FT-1121	2/8/07	FTI-104	Rosemount 3051CD4	mA	16.83	20.03	AL	16.840	20.040	
35	1-FT-1121	3/9/06	I-60-1	Rosemount 3051CD4	PSI	74.50	93.12	AF	16.800	19.980	
36	1-FT-1121	3/9/06	I-60-1	Rosemount 3051CD4	mA	16.80	20.00	AL	16.800	19.980	
37	1-FT-1121	4/30/04	I-60-1	Rosemount 3051CD4	PSI	74.50	93.12	AF	16.800	20.020	
38	1-FT-1121	4/30/04	I-60-1	Rosemount 3051CD4	mA	16.80	20.00	AL	16.800	20.020	
39	1-FT-1121	4/30/02	I-60-1	Rosemount 3051CD4	PSI	74.50	93.12	AF	16.800	19.980	
40	1-FT-1121	4/30/02	I-60-1	Rosemount 3051CD4	mA	16.80	20.00	AL	16.800	19.980	
41	1-FT-1121	4/12/00	I-60-1	Rosemount 3051CD4	PSI	74.50	93.12	AF	16.772	19.960	
42	1-FT-1121	4/12/00	I-60-1	Rosemount 3051CD4	mA	16.80	20.00	AL	16.794	19.992	
43	1-FT-1121A	3/5/08	I-60-1	Rosemount 3051CD4	PSI	74.50	93.12	AF	16.790	19.990	
44	1-FT-1121A	3/5/08	I-60-1	Rosemount 3051CD4	mA	16.77	19.97	AL	16.790	19.990	
45	1-FT-1121A	4/23/07	FTI-565	Rosemount 3051CD4	PSI	74.50	93.12	AF	16.780	19.980	
46	1-FT-1121A	4/23/07	FTI-565	Rosemount 3051CD4	mA	16.77	19.97	AL	16.780	19.980	
47	1-FT-1121A	4/9/07	FTI-565	Rosemount 3051CD4	PSI	74.50	93.12	AF	16.780	19.970	
48	1-FT-1121A	4/9/07	FTI-565	Rosemount 3051CD4	mA	16.77	19.97	AL	16.780	19.970	
49	1-FT-1121A	3/27/07	FTI-565	Rosemount 3051CD4	PSI	74.50	93.12	AF	16.790	19.970	
50	1-FT-1121A	3/27/07	FTI-565	Rosemount 3051CD4	mA	16.77	19.97	AL	16.790	19.970	
51	1-FT-1121A	3/10/06	I-60-1	Rosemount 3051CD4	PSI	74.50	93.12	AF	16.790	19.990	
52	1-FT-1121A	3/10/06	I-60-1	Rosemount 3051CD4	mA	16.80	20.00	AL	16.790	19.990	
53	1-FT-1121A	4/30/04	I-60-1	Rosemount 3051CD4	PSI	74.50	93.12	AF	EXC	EXC	Scaling change for this transmitter for these calibration points. AF data is excluded.
54	1-FT-1121A	4/30/04	I-60-1	Rosemount 3051CD4	mA	16.80	20.00	AL	16.800	20.000	
55	1-FT-1121A	4/30/02	I-60-1	Rosemount 3051CD4	PSI	75.54	93.26	AF	16.940	19.970	
56	1-FT-1121A	4/30/02	I-60-1	Rosemount 3051CD4	mA	16.96	20.00	AL	16.940	19.970	
57	1-FT-1121A	4/12/00	I-60-1	Rosemount 3051CD4	PSI	75.54	93.26	AF	EXC	EXC	Scaling change for this transmitter for these calibration points. AF data is excluded.
58	1-FT-1121A	4/12/00	I-60-1	Rosemount 3051CD4	mA	16.96	20.00	AL	16.937	19.971	
59	1-FT-1121A	5/12/98	FTI-104	Rosemount 3051CD4	PSI	74.50	93.12	AF	16.780	19.980	
60	1-FT-1121A	5/12/98	FTI-104	Rosemount 3051CD4	mA	16.80	20.00	AL	16.820	20.000	
61	1-FT-1121A	5/17/96	FTI-104	Rosemount 3051CD4	PSI	74.50	93.12	AF	16.810	20.010	
62	1-FT-1121A	5/17/96	FTI-104	Rosemount 3051CD4	mA	16.80	20.00	AL	16.810	20.010	
63	2-FT-1111	3/23/07	I-60-2	Rosemount 3051CD4	PSI	75.45	93.15	AF	16.980	20.010	
64	2-FT-1111	3/23/07	I-60-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.980	20.010	
65	2-FT-1111	3/7/05	I-60-2	Rosemount 3051CD4	PSI	75.45	93.15	AF	16.960	20.000	
66	2-FT-1111	3/7/05	I-60-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.960	20.000	
67	2-FT-1111	4/9/03	I-60-2	Rosemount 3051CD4	PSI	75.45	93.15	AF	16.960	19.990	

Instrument / Test Information					Scaling Data			AF/AL Data			
Seq. ID	Tag ID	Date	Surv Test	Make /Model	In/ Out Units	In / Out Pt 1	In / Out Pt 2	AF/AL	AF / AL Pt 1	AF / AL Pt 2	Comments
68	2-FT-1111	4/9/03	I-60-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.960	19.990	
69	2-FT-1111	4/19/01	I-60-2	Rosemount 3051CD4	PSI	75.45	93.15	AF	16.960	19.990	
70	2-FT-1111	4/19/01	I-60-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.960	19.990	
71	2-FT-1111	5/27/99	FTI-104	Rosemount 3051CD4	PSI	75.45	93.15	AF	16.940	19.980	Troubleshooting Cal. Check
72	2-FT-1111	5/27/99	FTI-104	Rosemount 3051CD4	mA	16.96	20.00	AL	16.940	19.980	Troubleshooting Cal. Check
73	2-FT-1111	4/21/99	I-535-2	Rosemount 3051CD4	PSI	75.45	93.15	AF	16.960	19.990	
74	2-FT-1111	4/21/99	I-535-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.960	19.990	
75	2-FT-1111	1/27/97	FTI-104	Rosemount 3051CD4	PSI	75.45	93.15	AF	16.960	19.990	
76	2-FT-1111	1/27/97	FTI-104	Rosemount 3051CD4	mA	16.96	20.00	AL	16.960	19.990	
77	2-FT-1111A	3/23/07	I-60-2	Rosemount 3051CD4	PSI	75.45	93.15	AF	16.970	20.020	
78	2-FT-1111A	3/23/07	I-60-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.970	20.020	
79	2-FT-1111A	3/7/05	I-60-2	Rosemount 3051CD4	PSI	75.45	93.15	AF	16.970	20.010	
80	2-FT-1111A	3/7/05	I-60-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.970	20.010	
81	2-FT-1111A	4/9/03	I-60-2	Rosemount 3051CD4	PSI	75.45	93.15	AF	16.970	20.010	
82	2-FT-1111A	4/9/03	I-60-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.970	20.010	
83	2-FT-1111A	4/19/01	I-60-2	Rosemount 3051CD4	PSI	75.45	93.15	AF	16.980	20.020	
84	2-FT-1111A	4/19/01	I-60-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.980	20.020	
85	2-FT-1111A	3/29/99	FTI-104	Rosemount 3051CD4	PSI	75.45	93.15	AF	16.940	19.980	Cal.Check After Tubing Work
86	2-FT-1111A	3/29/99	FTI-104	Rosemount 3051CD4	mA	16.96	20.00	AL	16.940	19.980	
87	2-FT-1111A	4/19/97	FTI-104	Rosemount 3051CD4	PSI	75.45	93.15	AF	16.950	19.990	
88	2-FT-1111A	4/19/97	FTI-104	Rosemount 3051CD4	mA	16.96	20.00	AL	16.950	19.990	
89	2-FT-1121	3/23/07	I-60-2	Rosemount 3051CD4	PSI	75.54	93.26	AF	16.960	19.990	
90	2-FT-1121	3/23/07	I-60-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.960	19.990	
91	2-FT-1121	3/7/05	I-60-2	Rosemount 3051CD4	PSI	75.54	93.26	AF	16.960	19.990	
92	2-FT-1121	3/7/05	I-60-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.960	19.990	
93	2-FT-1121	4/9/03	I-60-2	Rosemount 3051CD4	PSI	75.54	93.26	AF	16.960	20.000	
94	2-FT-1121	4/9/03	I-60-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.960	20.000	
95	2-FT-1121	4/19/01	I-60-2	Rosemount 3051CD4	PSI	75.54	93.26	AF	16.950	20.010	
96	2-FT-1121	4/19/01	I-60-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.950	20.010	
97	2-FT-1121	4/21/99	I-60-2	Rosemount 3051CD4	PSI	75.54	93.26	AF	16.930	19.970	
98	2-FT-1121	4/21/99	I-60-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.950	19.990	
99	2-FT-1121	1/27/97	FTI-104	Rosemount 3051CD4	PSI	75.54	93.26	AF	16.950	20.000	
100	2-FT-1121	1/27/97	FTI-104	Rosemount 3051CD4	mA	16.96	20.00	AL	16.950	20.000	
101	2-FT-1121A	3/23/07	I-60-2	Rosemount 3051CD4	PSI	75.54	93.26	AF	16.980	20.010	

Drift Analysis
Rosemount 3051CD4 Series
Differential Pressure Transmitters
Input Data

Instrument / Test Information					Scaling Data			AF/AL Data			
Seq. ID	Tag ID	Date	Surv Test	Make /Model	In/ Out Units	In / Out Pt 1	In / Out Pt 2	AF/AL	AF / AL Pt 1	AF / AL Pt 2	Comments
102	2-FT-1121A	3/23/07	I-60-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.980	20.010	
103	2-FT-1121A	3/7/05	I-60-2	Rosemount 3051CD4	PSI	75.54	93.26	AF	16.980	20.020	
104	2-FT-1121A	3/7/05	I-60-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.980	20.020	
105	2-FT-1121A	4/9/03	I-60-2	Rosemount 3051CD4	PSI	75.54	93.26	AF	16.970	20.010	
106	2-FT-1121A	4/9/03	I-60-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.970	20.010	
107	2-FT-1121A	4/19/01	I-60-2	Rosemount 3051CD4	PSI	75.54	93.26	AF	16.980	20.030	
108	2-FT-1121A	4/19/01	I-60-2	Rosemount 3051CD4	mA	16.96	20.00	AL	16.980	20.030	
109	2-FT-1121A	3/29/99	FTI-104	Rosemount 3051CD4	PSI	75.54	93.26	AF	16.950	20.000	Cal Check after Tubing Work
110	2-FT-1121A	3/29/99	FTI-104	Rosemount 3051CD4	mA	16.96	20.00	AL	16.950	20.000	Cal Check after Tubing Work
111	2-FT-1121A	4/19/97	FTI-104	Rosemount 3051CD4	PSI	75.54	93.26	AF	16.940	20.000	
112	2-FT-1121A	4/19/97	FTI-104	Rosemount 3051CD4	mA	16.96	20.00	AL	16.940	20.000	

IDENTIFYING INFORMATION				AF/AL CONVERTED TO % SPAN (AFAL-Min)*100%/Span		RANGE VALUES				ACTUAL AF/AL RAW VALUES	
Seq. ID	Tag Number	Date	AF / AL	1 (80% Up)	2 (100% Up)	Min	Max	Span (Max-Min)	Units	1 (80% Up)	2 (100% Up)
1	1-FT-1111	3/5/08	AF	80.12500	100.00000	4.0	20.0	16.0	mAdc	16.820	20.000
2	1-FT-1111	3/5/08	AL	80.12500	100.00000	4.0	20.0	16.0	mAdc	16.820	20.000
3	1-FT-1111	3/9/06	AF	80.06250	100.06250	4.0	20.0	16.0	mAdc	16.810	20.010
4	1-FT-1111	3/9/06	AL	80.06250	100.06250	4.0	20.0	16.0	mAdc	16.810	20.010
5	1-FT-1111	4/30/04	AF	79.87500	100.00000	4.0	20.0	16.0	mAdc	16.780	20.000
6	1-FT-1111	4/30/04	AL	79.87500	100.00000	4.0	20.0	16.0	mAdc	16.780	20.000
7	1-FT-1111	4/30/02	AF	79.93750	100.00000	4.0	20.0	16.0	mAdc	16.790	20.000
8	1-FT-1111	4/30/02	AL	79.93750	100.00000	4.0	20.0	16.0	mAdc	16.790	20.000
9	1-FT-1111	4/12/00	AF	79.74375	99.70625	4.0	20.0	16.0	mAdc	16.759	19.953
10	1-FT-1111	4/12/00	AL	79.95000	99.93750	4.0	20.0	16.0	mAdc	16.792	19.990
11	1-FT-1111A	3/5/08	AF	79.93750	99.93750	4.0	20.0	16.0	mAdc	16.790	19.990
12	1-FT-1111A	3/5/08	AL	79.93750	99.93750	4.0	20.0	16.0	mAdc	16.790	19.990
13	1-FT-1111A	3/9/06	AF	79.93750	99.93750	4.0	20.0	16.0	mAdc	16.790	19.990
14	1-FT-1111A	3/9/06	AL	79.93750	99.93750	4.0	20.0	16.0	mAdc	16.790	19.990
15	1-FT-1111A	4/30/04	AF	EXC	EXC	4.0	20.0	16.0	mAdc	EXC	EXC
16	1-FT-1111A	4/30/04	AL	79.87500	100.00000	4.0	20.0	16.0	mAdc	16.780	20.000
17	1-FT-1111A	4/30/02	AF	81.12500	100.12500	4.0	20.0	16.0	mAdc	16.980	20.020
18	1-FT-1111A	4/30/02	AL	81.12500	100.12500	4.0	20.0	16.0	mAdc	16.980	20.020
19	1-FT-1111A	4/12/00	AF	EXC	EXC	4.0	20.0	16.0	mAdc	EXC	EXC
20	1-FT-1111A	4/12/00	AL	81.05000	100.05625	4.0	20.0	16.0	mAdc	16.968	20.009
21	1-FT-1111A	5/12/98	AF	80.00000	99.93750	4.0	20.0	16.0	mAdc	16.800	19.990
22	1-FT-1111A	5/12/98	AL	80.00000	99.93750	4.0	20.0	16.0	mAdc	16.800	19.990
23	1-FT-1111A	5/17/96	AF	80.00000	100.00000	4.0	20.0	16.0	mAdc	16.800	20.000
24	1-FT-1111A	5/17/96	AL	80.00000	100.00000	4.0	20.0	16.0	mAdc	16.800	20.000
25	1-FT-1121	3/5/08	AF	80.25000	100.25000	4.0	20.0	16.0	mAdc	16.840	20.040
26	1-FT-1121	3/5/08	AL	80.25000	100.25000	4.0	20.0	16.0	mAdc	16.840	20.040
27	1-FT-1121	4/23/07	AF	80.62500	100.68750	4.0	20.0	16.0	mAdc	16.900	20.110
28	1-FT-1121	4/23/07	AL	80.25000	100.31250	4.0	20.0	16.0	mAdc	16.840	20.050
29	1-FT-1121	4/9/07	AF	80.18750	100.18750	4.0	20.0	16.0	mAdc	16.830	20.030
30	1-FT-1121	4/9/07	AL	80.18750	100.18750	4.0	20.0	16.0	mAdc	16.830	20.030
31	1-FT-1121	3/27/07	AF	80.12500	100.18750	4.0	20.0	16.0	mAdc	16.820	20.030
32	1-FT-1121	3/27/07	AL	80.12500	100.18750	4.0	20.0	16.0	mAdc	16.820	20.030

IDENTIFYING INFORMATION				AF/AL CONVERTED TO % SPAN (AFAL-Min)*100%/Span		RANGE VALUES				ACTUAL AF/AL RAW VALUES	
Seq. ID	Tag Number	Date	AF / AL	1 (80% Up)	2 (100% Up)	Min	Max	Span (Max-Min)	Units	1 (80% Up)	2 (100% Up)
33	1-FT-1121	2/8/07	AF	EXC	EXC	4.0	20.0	16.0	mAdc	EXC	EXC
34	1-FT-1121	2/8/07	AL	80.25000	100.25000	4.0	20.0	16.0	mAdc	16.840	20.040
35	1-FT-1121	3/9/06	AF	80.00000	99.87500	4.0	20.0	16.0	mAdc	16.800	19.980
36	1-FT-1121	3/9/06	AL	80.00000	99.87500	4.0	20.0	16.0	mAdc	16.800	19.980
37	1-FT-1121	4/30/04	AF	80.00000	100.12500	4.0	20.0	16.0	mAdc	16.800	20.020
38	1-FT-1121	4/30/04	AL	80.00000	100.12500	4.0	20.0	16.0	mAdc	16.800	20.020
39	1-FT-1121	4/30/02	AF	80.00000	99.87500	4.0	20.0	16.0	mAdc	16.800	19.980
40	1-FT-1121	4/30/02	AL	80.00000	99.87500	4.0	20.0	16.0	mAdc	16.800	19.980
41	1-FT-1121	4/12/00	AF	79.82500	99.75000	4.0	20.0	16.0	mAdc	16.772	19.960
42	1-FT-1121	4/12/00	AL	79.96250	99.95000	4.0	20.0	16.0	mAdc	16.794	19.992
43	1-FT-1121A	3/5/08	AF	79.93750	99.93750	4.0	20.0	16.0	mAdc	16.790	19.990
44	1-FT-1121A	3/5/08	AL	79.93750	99.93750	4.0	20.0	16.0	mAdc	16.790	19.990
45	1-FT-1121A	4/23/07	AF	79.87500	99.87500	4.0	20.0	16.0	mAdc	16.780	19.980
46	1-FT-1121A	4/23/07	AL	79.87500	99.87500	4.0	20.0	16.0	mAdc	16.780	19.980
47	1-FT-1121A	4/9/07	AF	79.87500	99.81250	4.0	20.0	16.0	mAdc	16.780	19.970
48	1-FT-1121A	4/9/07	AL	79.87500	99.81250	4.0	20.0	16.0	mAdc	16.780	19.970
49	1-FT-1121A	3/27/07	AF	79.93750	99.81250	4.0	20.0	16.0	mAdc	16.790	19.970
50	1-FT-1121A	3/27/07	AL	79.93750	99.81250	4.0	20.0	16.0	mAdc	16.790	19.970
51	1-FT-1121A	3/10/06	AF	79.93750	99.93750	4.0	20.0	16.0	mAdc	16.790	19.990
52	1-FT-1121A	3/10/06	AL	79.93750	99.93750	4.0	20.0	16.0	mAdc	16.790	19.990
53	1-FT-1121A	4/30/04	AF	EXC	EXC	4.0	20.0	16.0	mAdc	EXC	EXC
54	1-FT-1121A	4/30/04	AL	80.00000	100.00000	4.0	20.0	16.0	mAdc	16.800	20.000
55	1-FT-1121A	4/30/02	AF	80.87500	99.81250	4.0	20.0	16.0	mAdc	16.940	19.970
56	1-FT-1121A	4/30/02	AL	80.87500	99.81250	4.0	20.0	16.0	mAdc	16.940	19.970
57	1-FT-1121A	4/12/00	AF	EXC	EXC	4.0	20.0	16.0	mAdc	EXC	EXC
58	1-FT-1121A	4/12/00	AL	80.85625	99.81875	4.0	20.0	16.0	mAdc	16.937	19.971
59	1-FT-1121A	5/12/98	AF	79.87500	99.87500	4.0	20.0	16.0	mAdc	16.780	19.980
60	1-FT-1121A	5/12/98	AL	80.12500	100.00000	4.0	20.0	16.0	mAdc	16.820	20.000
61	1-FT-1121A	5/17/96	AF	80.06250	100.06250	4.0	20.0	16.0	mAdc	16.810	20.010
62	1-FT-1121A	5/17/96	AL	80.06250	100.06250	4.0	20.0	16.0	mAdc	16.810	20.010
63	2-FT-1111	3/23/07	AF	81.12500	100.06250	4.0	20.0	16.0	mAdc	16.980	20.010
64	2-FT-1111	3/23/07	AL	81.12500	100.06250	4.0	20.0	16.0	mAdc	16.980	20.010

IDENTIFYING INFORMATION				AF/AL CONVERTED TO % SPAN (AFAL-Min)*100%/Span		RANGE VALUES				ACTUAL AF/AL RAW VALUES	
Seq. ID	Tag Number	Date	AF / AL	1 (80% Up)	2 (100% Up)	Min	Max	Span (Max-Min)	Units	1 (80% Up)	2 (100% Up)
65	2-FT-1111	3/7/05	AF	81.00000	100.00000	4.0	20.0	16.0	mAdc	16.960	20.000
66	2-FT-1111	3/7/05	AL	81.00000	100.00000	4.0	20.0	16.0	mAdc	16.960	20.000
67	2-FT-1111	4/9/03	AF	81.00000	99.93750	4.0	20.0	16.0	mAdc	16.960	19.990
68	2-FT-1111	4/9/03	AL	81.00000	99.93750	4.0	20.0	16.0	mAdc	16.960	19.990
69	2-FT-1111	4/19/01	AF	81.00000	99.93750	4.0	20.0	16.0	mAdc	16.960	19.990
70	2-FT-1111	4/19/01	AL	81.00000	99.93750	4.0	20.0	16.0	mAdc	16.960	19.990
71	2-FT-1111	5/27/99	AF	80.87500	99.87500	4.0	20.0	16.0	mAdc	16.940	19.980
72	2-FT-1111	5/27/99	AL	80.87500	99.87500	4.0	20.0	16.0	mAdc	16.940	19.980
73	2-FT-1111	4/21/99	AF	81.00000	99.93750	4.0	20.0	16.0	mAdc	16.960	19.990
74	2-FT-1111	4/21/99	AL	81.00000	99.93750	4.0	20.0	16.0	mAdc	16.960	19.990
75	2-FT-1111	1/27/97	AF	81.00000	99.93750	4.0	20.0	16.0	mAdc	16.960	19.990
76	2-FT-1111	1/27/97	AL	81.00000	99.93750	4.0	20.0	16.0	mAdc	16.960	19.990
77	2-FT-1111A	3/23/07	AF	81.06250	100.12500	4.0	20.0	16.0	mAdc	16.970	20.020
78	2-FT-1111A	3/23/07	AL	81.06250	100.12500	4.0	20.0	16.0	mAdc	16.970	20.020
79	2-FT-1111A	3/7/05	AF	81.06250	100.06250	4.0	20.0	16.0	mAdc	16.970	20.010
80	2-FT-1111A	3/7/05	AL	81.06250	100.06250	4.0	20.0	16.0	mAdc	16.970	20.010
81	2-FT-1111A	4/9/03	AF	81.06250	100.06250	4.0	20.0	16.0	mAdc	16.970	20.010
82	2-FT-1111A	4/9/03	AL	81.06250	100.06250	4.0	20.0	16.0	mAdc	16.970	20.010
83	2-FT-1111A	4/19/01	AF	81.12500	100.12500	4.0	20.0	16.0	mAdc	16.980	20.020
84	2-FT-1111A	4/19/01	AL	81.12500	100.12500	4.0	20.0	16.0	mAdc	16.980	20.020
85	2-FT-1111A	3/29/99	AF	80.87500	99.87500	4.0	20.0	16.0	mAdc	16.940	19.980
86	2-FT-1111A	3/29/99	AL	80.87500	99.87500	4.0	20.0	16.0	mAdc	16.940	19.980
87	2-FT-1111A	4/19/97	AF	80.93750	99.93750	4.0	20.0	16.0	mAdc	16.950	19.990
88	2-FT-1111A	4/19/97	AL	80.93750	99.93750	4.0	20.0	16.0	mAdc	16.950	19.990
89	2-FT-1121	3/23/07	AF	81.00000	99.93750	4.0	20.0	16.0	mAdc	16.960	19.990
90	2-FT-1121	3/23/07	AL	81.00000	99.93750	4.0	20.0	16.0	mAdc	16.960	19.990
91	2-FT-1121	3/7/05	AF	81.00000	99.93750	4.0	20.0	16.0	mAdc	16.960	19.990
92	2-FT-1121	3/7/05	AL	81.00000	99.93750	4.0	20.0	16.0	mAdc	16.960	19.990
93	2-FT-1121	4/9/03	AF	81.00000	100.00000	4.0	20.0	16.0	mAdc	16.960	20.000
94	2-FT-1121	4/9/03	AL	81.00000	100.00000	4.0	20.0	16.0	mAdc	16.960	20.000
95	2-FT-1121	4/19/01	AF	80.938	100.063	4.0	20.0	16.0	mAdc	16.950	20.010
96	2-FT-1121	4/19/01	AL	80.938	100.063	4.0	20.0	16.0	mAdc	16.950	20.010

IDENTIFYING INFORMATION				AF/AL CONVERTED TO % SPAN (AFAL-Min)*100%/Span		RANGE VALUES				ACTUAL AF/AL RAW VALUES	
Seq. ID	Tag Number	Date	AF / AL	1 (80% Up)	2 (100% Up)	Min	Max	Span (Max-Min)	Units	1 (80% Up)	2 (100% Up)
97	2-FT-1121	4/21/99	AF	80.813	99.813	4.0	20.0	16.0	mAdc	16.930	19.970
98	2-FT-1121	4/21/99	AL	80.938	99.938	4.0	20.0	16.0	mAdc	16.950	19.990
99	2-FT-1121	1/27/97	AF	80.938	100.000	4.0	20.0	16.0	mAdc	16.950	20.000
100	2-FT-1121	1/27/97	AL	80.938	100.000	4.0	20.0	16.0	mAdc	16.950	20.000
101	2-FT-1121A	3/23/07	AF	81.125	100.063	4.0	20.0	16.0	mAdc	16.980	20.010
102	2-FT-1121A	3/23/07	AL	81.125	100.063	4.0	20.0	16.0	mAdc	16.980	20.010
103	2-FT-1121A	3/7/05	AF	81.125	100.125	4.0	20.0	16.0	mAdc	16.980	20.020
104	2-FT-1121A	3/7/05	AL	81.125	100.125	4.0	20.0	16.0	mAdc	16.980	20.020
105	2-FT-1121A	4/9/03	AF	81.063	100.063	4.0	20.0	16.0	mAdc	16.970	20.010
106	2-FT-1121A	4/9/03	AL	81.063	100.063	4.0	20.0	16.0	mAdc	16.970	20.010
107	2-FT-1121A	4/19/01	AF	81.125	100.188	4.0	20.0	16.0	mAdc	16.980	20.030
108	2-FT-1121A	4/19/01	AL	81.125	100.188	4.0	20.0	16.0	mAdc	16.980	20.030
109	2-FT-1121A	3/29/99	AF	80.938	100.000	4.0	20.0	16.0	mAdc	16.950	20.000
110	2-FT-1121A	3/29/99	AL	80.938	100.000	4.0	20.0	16.0	mAdc	16.950	20.000
111	2-FT-1121A	4/19/97	AF	80.875	100.000	4.0	20.0	16.0	mAdc	16.940	20.000
112	2-FT-1121A	4/19/97	AL	80.875	100.000	4.0	20.0	16.0	mAdc	16.940	20.000

Seq. ID	Make / Model Number	Tag Number	Cal Date	AF/AL Status	AF/AL CALIBRATION DATA (%Span) 1 (80% Up)	2 (100% Up)	FINAL OUTLIER COMMENTS	CAL INTERVAL = (Current Date - Previous Date) Days	Months	Seq. ID	Tag Number	Cal Date	DRIFT (%Span) = (Current Cal AF Data - Prev Cal AL Data) 1 (80% Up)	2 (100% Up)	CAL INTERVAL = (Current Date - Previous Date) Days	Months
1	Rosemount 3051CD4	1-FT-1111	3/5/08	AF	80.12500	100.00000		727	23.9	1	1-FT-1111	3/5/08	0.06250	-0.06250	727	23.8
2	Rosemount 3051CD4	1-FT-1111	3/5/08	AL	80.12500	100.00000				3	1-FT-1111	3/9/06	0.18750	0.06250	678	22.2
3	Rosemount 3051CD4	1-FT-1111	3/9/06	AF	80.06250	100.06250		678	22.3	5	1-FT-1111	4/30/04	-0.06250	0.00000	731	23.9
4	Rosemount 3051CD4	1-FT-1111	3/9/06	AL	80.06250	100.06250				7	1-FT-1111	4/30/02	-0.01250	0.06250	748	24.5
5	Rosemount 3051CD4	1-FT-1111	4/30/04	AF	79.87500	100.00000		731	24.0							
6	Rosemount 3051CD4	1-FT-1111	4/30/04	AL	79.87500	100.00000				11	1-FT-1111A	3/5/08	0.00000	0.00000	727	23.8
7	Rosemount 3051CD4	1-FT-1111	4/30/02	AF	79.93750	100.00000		748	24.6	13	1-FT-1111A	3/9/06	0.06250	-0.06250	678	22.2
8	Rosemount 3051CD4	1-FT-1111	4/30/02	AL	79.93750	100.00000										
9	Rosemount 3051CD4	1-FT-1111	4/12/00	AF	79.74375	99.70625				17	1-FT-1111A	4/30/02	0.07500	0.06875	748	24.5
10	Rosemount 3051CD4	1-FT-1111	4/12/00	AL	79.95000	99.93750										
11	Rosemount 3051CD4	1-FT-1111A	3/5/08	AF	79.93750	99.93750		727	23.9	21	1-FT-1111A	5/12/98	0.00000	-0.06250	725	23.7
12	Rosemount 3051CD4	1-FT-1111A	3/5/08	AL	79.93750	99.93750										
13	Rosemount 3051CD4	1-FT-1111A	3/9/06	AF	79.93750	99.93750		678	22.3	25	1-FT-1121	3/5/08	0.00000	-0.06250	317	10.4
14	Rosemount 3051CD4	1-FT-1111A	3/9/06	AL	79.93750	99.93750				27	1-FT-1121	4/23/07	0.43750	0.50000	14	0.5
15	Rosemount 3051CD4	1-FT-1111A	4/30/04	AF	EXC	EXC		731	24.0	29	1-FT-1121	4/9/07	0.06250	0.00000	13	0.4
16	Rosemount 3051CD4	1-FT-1111A	4/30/04	AL	79.87500	100.00000				31	1-FT-1121	3/27/07	-0.12500	-0.06250	47	1.5
17	Rosemount 3051CD4	1-FT-1111A	4/30/02	AF	81.12500	100.12500		748	24.6							
18	Rosemount 3051CD4	1-FT-1111A	4/30/02	AL	81.12500	100.12500				35	1-FT-1121	3/9/06	0.00000	-0.25000	678	22.2
19	Rosemount 3051CD4	1-FT-1111A	4/12/00	AF	EXC	EXC		701	23.0	37	1-FT-1121	4/30/04	0.00000	0.25000	731	23.9
20	Rosemount 3051CD4	1-FT-1111A	4/12/00	AL	81.05000	100.05625				39	1-FT-1121	4/30/02	0.03750	-0.07500	748	24.5
21	Rosemount 3051CD4	1-FT-1111A	5/12/98	AF	80.00000	99.93750		725	23.8							
22	Rosemount 3051CD4	1-FT-1111A	5/12/98	AL	80.00000	99.93750				43	1-FT-1121A	3/5/08	0.06250	0.06250	317	10.4
23	Rosemount 3051CD4	1-FT-1111A	5/17/96	AF	80.00000	100.00000				45	1-FT-1121A	4/23/07	0.00000	0.06250	14	0.5
24	Rosemount 3051CD4	1-FT-1111A	5/17/96	AL	80.00000	100.00000				47	1-FT-1121A	4/9/07	-0.06250	0.00000	13	0.4
25	Rosemount 3051CD4	1-FT-1121	3/5/08	AF	80.25000	100.25000		317	10.4	49	1-FT-1121A	3/27/07	0.00000	-0.12500	382	12.5
26	Rosemount 3051CD4	1-FT-1121	3/5/08	AL	80.25000	100.25000				51	1-FT-1121A	3/10/06	-0.06250	-0.06250	679	22.2
27	Rosemount 3051CD5	1-FT-1121	4/23/07	AF	80.62500	100.68750	Outlier Detected and Removed for all Calibration Points.	14	0.5							
28	Rosemount 3051CD6	1-FT-1121	4/23/07	AL	80.25000	100.31250				55	1-FT-1121A	4/30/02	0.01875	-0.00625	748	24.5
29	Rosemount 3051CD7	1-FT-1121	4/9/07	AF	80.18750	100.18750		13	0.4							
30	Rosemount 3051CD8	1-FT-1121	4/9/07	AL	80.18750	100.18750				59	1-FT-1121A	5/12/98	-0.18750	-0.18750	725	23.7
31	Rosemount 3051CD4	1-FT-1121	3/27/07	AF	80.12500	100.18750		47	1.5							
32	Rosemount 3051CD4	1-FT-1121	3/27/07	AL	80.12500	100.18750				63	2-FT-1111	3/23/07	0.12500	0.06250	746	24.4
33	Rosemount 3051CD4	1-FT-1121	2/8/07	AF	EXC	EXC		336	11.0	65	2-FT-1111	3/7/05	0.00000	0.06250	698	22.8
34	Rosemount 3051CD4	1-FT-1121	2/8/07	AL	80.25000	100.25000				67	2-FT-1111	4/9/03	0.00000	0.00000	720	23.6
35	Rosemount 3051CD4	1-FT-1121	3/9/06	AF	80.00000	99.87500		678	22.3	69	2-FT-1111	4/19/01	0.12500	0.06250	693	22.7
36	Rosemount 3051CD4	1-FT-1121	3/9/06	AL	80.00000	99.87500				71	2-FT-1111	5/27/99	-0.12500	-0.06250	36	1.2
37	Rosemount 3051CD4	1-FT-1121	4/30/04	AF	80.00000	100.12500		731	24.0	73	2-FT-1111	4/21/99	0.00000	0.00000	814	26.6
38	Rosemount 3051CD4	1-FT-1121	4/30/04	AL	80.00000	100.12500										
39	Rosemount 3051CD4	1-FT-1121	4/30/02	AF	80.00000	99.87500		748	24.6	77	2-FT-1111A	3/23/07	0.00000	0.06250	746	24.4
40	Rosemount 3051CD4	1-FT-1121	4/30/02	AL	80.00000	99.87500				79	2-FT-1111A	3/7/05	0.00000	0.00000	698	22.8
41	Rosemount 3051CD4	1-FT-1121	4/12/00	AF	79.82500	99.75000				81	2-FT-1111A	4/9/03	-0.06250	-0.06250	720	23.6
42	Rosemount 3051CD4	1-FT-1121	4/12/00	AL	79.96250	99.95000				83	2-FT-1111A	4/19/01	0.25000	0.25000	752	24.6
43	Rosemount 3051CD4	1-FT-1121A	3/5/08	AF	79.93750	99.93750		317	10.4	85	2-FT-1111A	3/29/99	-0.06250	-0.06250	709	23.2
44	Rosemount 3051CD4	1-FT-1121A	3/5/08	AL	79.93750	99.93750										
45	Rosemount 3051CD4	1-FT-1121A	4/23/07	AF	79.87500	99.87500		14	0.5	89	2-FT-1121	3/23/07	0.00000	0.00000	746	24.4

Seq. ID	Make / Model Number	Tag Number	Cal Date	AF/AL Status	AF/AL CALIBRATION DATA (%Span) 1 (80% Up)	2 (100% Up)	FINAL OUTLIER COMMENTS	CAL INTERVAL = (Current Date - Previous Date) Days	Months
46	Rosemount 3051CD4	1-FT-1121A	4/23/07	AL	79.87500	99.87500			
47	Rosemount 3051CD4	1-FT-1121A	4/9/07	AF	79.87500	99.81250		13	0.4
48	Rosemount 3051CD4	1-FT-1121A	4/9/07	AL	79.87500	99.81250			
49	Rosemount 3051CD4	1-FT-1121A	3/27/07	AF	79.93750	99.81250		382	12.6
50	Rosemount 3051CD4	1-FT-1121A	3/27/07	AL	79.93750	99.81250			
51	Rosemount 3051CD4	1-FT-1121A	3/10/06	AF	79.93750	99.93750		679	22.3
52	Rosemount 3051CD4	1-FT-1121A	3/10/06	AL	79.93750	99.93750			
53	Rosemount 3051CD4	1-FT-1121A	4/30/04	AF	EXC	EXC		731	24.0
54	Rosemount 3051CD4	1-FT-1121A	4/30/04	AL	80.00000	100.00000			
55	Rosemount 3051CD4	1-FT-1121A	4/30/02	AF	80.87500	99.81250		748	24.6
56	Rosemount 3051CD4	1-FT-1121A	4/30/02	AL	80.87500	99.81250			
57	Rosemount 3051CD4	1-FT-1121A	4/12/00	AF	EXC	EXC		701	23.0
58	Rosemount 3051CD4	1-FT-1121A	4/12/00	AL	80.85625	99.81875			
59	Rosemount 3051CD4	1-FT-1121A	5/12/98	AF	79.87500	99.87500		725	23.8
60	Rosemount 3051CD4	1-FT-1121A	5/12/98	AL	80.12500	100.00000			
61	Rosemount 3051CD4	1-FT-1121A	5/17/96	AF	80.06250	100.06250			
62	Rosemount 3051CD4	1-FT-1121A	5/17/96	AL	80.06250	100.06250			
63	Rosemount 3051CD4	2-FT-1111	3/23/07	AF	81.12500	100.06250		746	24.5
64	Rosemount 3051CD4	2-FT-1111	3/23/07	AL	81.12500	100.06250			
65	Rosemount 3051CD4	2-FT-1111	3/7/05	AF	81.00000	100.00000		698	22.9
66	Rosemount 3051CD4	2-FT-1111	3/7/05	AL	81.00000	100.00000			
67	Rosemount 3051CD4	2-FT-1111	4/9/03	AF	81.00000	99.93750		720	23.7
68	Rosemount 3051CD4	2-FT-1111	4/9/03	AL	81.00000	99.93750			
69	Rosemount 3051CD4	2-FT-1111	4/19/01	AF	81.00000	99.93750		693	22.8
70	Rosemount 3051CD4	2-FT-1111	4/19/01	AL	81.00000	99.93750			
71	Rosemount 3051CD4	2-FT-1111	5/27/99	AF	80.87500	99.87500		36	1.2
72	Rosemount 3051CD4	2-FT-1111	5/27/99	AL	80.87500	99.87500			
73	Rosemount 3051CD4	2-FT-1111	4/21/99	AF	81.00000	99.93750		814	26.7
74	Rosemount 3051CD4	2-FT-1111	4/21/99	AL	81.00000	99.93750			
75	Rosemount 3051CD4	2-FT-1111	1/27/97	AF	81.00000	99.93750			
76	Rosemount 3051CD4	2-FT-1111	1/27/97	AL	81.00000	99.93750			
77	Rosemount 3051CD4	2-FT-1111A	3/23/07	AF	81.06250	100.12500		746	24.5
78	Rosemount 3051CD4	2-FT-1111A	3/23/07	AL	81.06250	100.12500			
79	Rosemount 3051CD4	2-FT-1111A	3/7/05	AF	81.06250	100.06250		698	22.9
80	Rosemount 3051CD4	2-FT-1111A	3/7/05	AL	81.06250	100.06250			
81	Rosemount 3051CD4	2-FT-1111A	4/9/03	AF	81.06250	100.06250		720	23.7
82	Rosemount 3051CD4	2-FT-1111A	4/9/03	AL	81.06250	100.06250			
83	Rosemount 3051CD4	2-FT-1111A	4/19/01	AF	81.12500	100.12500		752	24.7
84	Rosemount 3051CD4	2-FT-1111A	4/19/01	AL	81.12500	100.12500			
85	Rosemount 3051CD4	2-FT-1111A	3/29/99	AF	80.87500	99.87500		709	23.3
86	Rosemount 3051CD4	2-FT-1111A	3/29/99	AL	80.87500	99.87500			
87	Rosemount 3051CD4	2-FT-1111A	4/19/97	AF	80.93750	99.93750			
88	Rosemount 3051CD4	2-FT-1111A	4/19/97	AL	80.93750	99.93750			
89	Rosemount 3051CD4	2-FT-1121	3/23/07	AF	81.00000	99.93750		746	24.5
90	Rosemount 3051CD4	2-FT-1121	3/23/07	AL	81.00000	99.93750			
91	Rosemount 3051CD4	2-FT-1121	3/7/05	AF	81.00000	99.93750		698	22.9
92	Rosemount 3051CD4	2-FT-1121	3/7/05	AL	81.00000	99.93750			
93	Rosemount 3051CD4	2-FT-1121	4/9/03	AF	81.00000	100.00000		720	23.7
94	Rosemount 3051CD4	2-FT-1121	4/9/03	AL	81.00000	100.00000			

Seq. ID	Tag Number	Cal Date	DRIFT (%Span) = (Current Cal AF Data - Prev Cal AL Data) 1 (80% Up)	2 (100% Up)	CAL INTERVAL = (Current Date - Previous Date) Days	Months
91	2-FT-1121	3/7/05	0.00000	-0.06250	698	22.8
93	2-FT-1121	4/9/03	0.06250	-0.06250	720	23.6
95	2-FT-1121	4/19/01	0.00000	0.12500	729	23.9
97	2-FT-1121	4/21/99	-0.12500	-0.18750	814	26.6
101	2-FT-1121A	3/23/07	0.00000	-0.06250	746	24.4
103	2-FT-1121A	3/7/05	0.06250	0.06250	698	22.8
105	2-FT-1121A	4/9/03	-0.06250	-0.12500	720	23.6
107	2-FT-1121A	4/19/01	0.18750	0.18750	752	24.6
109	2-FT-1121A	3/29/99	0.06250	0.00000	709	23.2

Drift Analysis
Rosemount 3051CD4 Series
Differential Pressure Transmitters
AF-AL Data

Seq. ID	Make / Model Number	Tag Number	Cal Date	AF/AL Status	AF/AL CALIBRATION DATA (%Span) 1 (80% Up)	2 (100% Up)	FINAL OUTLIER COMMENTS	CAL INTERVAL = (Current Date - Previous Date) Days	Months	Seq. ID	Tag Number	Cal Date	DRIFT (%Span) = (Current Cal AF Data - Prev Cal AL Data) 1 (80% Up)	2 (100% Up)	CAL INTERVAL = (Current Date - Previous Date) Days	Months
95	Rosemount 3051CD4	2-FT-1121	4/19/01	AF	80.93750	100.06250		729	24.0							
96	Rosemount 3051CD4	2-FT-1121	4/19/01	AL	80.93750	100.06250										
97	Rosemount 3051CD4	2-FT-1121	4/21/99	AF	80.81250	99.81250		814	26.7							
98	Rosemount 3051CD4	2-FT-1121	4/21/99	AL	80.93750	99.93750										
99	Rosemount 3051CD4	2-FT-1121	1/27/97	AF	80.93750	100.00000										
100	Rosemount 3051CD4	2-FT-1121	1/27/97	AL	80.93750	100.00000										
101	Rosemount 3051CD4	2-FT-1121A	3/23/07	AF	81.12500	100.06250		746	24.5							
102	Rosemount 3051CD4	2-FT-1121A	3/23/07	AL	81.12500	100.06250										
103	Rosemount 3051CD4	2-FT-1121A	3/7/05	AF	81.12500	100.12500		698	22.9							
104	Rosemount 3051CD4	2-FT-1121A	3/7/05	AL	81.12500	100.12500										
105	Rosemount 3051CD4	2-FT-1121A	4/9/03	AF	81.06250	100.06250		720	23.7							
106	Rosemount 3051CD4	2-FT-1121A	4/9/03	AL	81.06250	100.06250										
107	Rosemount 3051CD4	2-FT-1121A	4/19/01	AF	81.12500	100.18750		752	24.7							
108	Rosemount 3051CD4	2-FT-1121A	4/19/01	AL	81.12500	100.18750										
109	Rosemount 3051CD4	2-FT-1121A	3/29/99	AF	80.93750	100.00000		709	23.3							
110	Rosemount 3051CD4	2-FT-1121A	3/29/99	AL	80.93750	100.00000										
111	Rosemount 3051CD4	2-FT-1121A	4/19/97	AF	80.87500	100.00000										
112	Rosemount 3051CD4	2-FT-1121A	4/19/97	AL	80.87500	100.00000										

Drift Analysis
Rosemount 3051CD4 Series
Differential Pressure Transmitters
Outliers & Summary

Seq. ID	Tag Number	Drift (Pt 1) (80% Up) (%Span)	Drift (Pt 2) (100% Up) (%Span)	Cal Interval (Days)	Ext. Stud. Deviate Point 1 (80% Up)	Ext. Stud. Deviate Point 2 (100% Up)	Raw Data ID#	Tag Number	Final Drift Data (Pt 1) (80% Up) (%Span)	Final Drift Data (Pt 2) (100% Up) (%Span)	Cal Interval (Days)
1	1-FT-1111	0.0625	-0.0625	727	0.384	0.534	1	1-FT-1111	0.06250	-0.06250	727
3	1-FT-1111	0.1875	0.0625	678	1.558	0.447	3	1-FT-1111	0.18750	0.06250	678
5	1-FT-1111	-0.0625	0.0000	731	0.791	0.043	5	1-FT-1111	-0.06250	0.00000	731
7	1-FT-1111	-0.0125	0.0625	748	0.321	0.447	7	1-FT-1111	-0.01250	0.06250	748
11	1-FT-1111A	0.0000	0.0000	727	0.204	0.043	11	1-FT-1111A	0.00000	0.00000	727
13	1-FT-1111A	0.0625	-0.0625	678	0.384	0.534	13	1-FT-1111A	0.06250	-0.06250	678
15	1-FT-1111A			731			15	1-FT-1111A			731
17	1-FT-1111A	0.0750	0.0687	748	0.501	0.497	17	1-FT-1111A	0.07500	0.06875	748
19	1-FT-1111A			701			19	1-FT-1111A			701
21	1-FT-1111A	0.0000	-0.0625	725	0.204	0.534	21	1-FT-1111A	0.00000	-0.06250	725
25	1-FT-1121	0.0000	-0.0625	317	0.204	0.534	25	1-FT-1121	0.00000	-0.06250	317
27	1-FT-1121	0.4375	0.5000	14	3.908	3.883	27	1-FT-1121	OUTLIER	OUTLIER	14
29	1-FT-1121	0.0625	0.0000	13	0.384	0.043	29	1-FT-1121	0.06250	0.00000	13
31	1-FT-1121	-0.1250	-0.0625	47	1.378	0.534	31	1-FT-1121	-0.12500	-0.06250	47
33	1-FT-1121			336			33	1-FT-1121			336
35	1-FT-1121	0.0000	-0.2500	678	0.204	2.007	35	1-FT-1121	0.00000	-0.25000	678
37	1-FT-1121	0.0000	0.2500	731	0.204	1.920	37	1-FT-1121	0.00000	0.25000	731
39	1-FT-1121	0.0375	-0.0750	748	0.149	0.632	39	1-FT-1121	0.03750	-0.07500	748
43	1-FT-1121A	0.0625	0.0625	317	0.384	0.447	43	1-FT-1121A	0.06250	0.06250	317
45	1-FT-1121A	0.0000	0.0625	14	0.204	0.447	45	1-FT-1121A	0.00000	0.06250	14
47	1-FT-1121A	-0.0625	0.0000	13	0.791	0.043	47	1-FT-1121A	-0.06250	0.00000	13
49	1-FT-1121A	0.0000	-0.1250	382	0.204	1.025	49	1-FT-1121A	0.00000	-0.12500	382
51	1-FT-1121A	-0.0625	-0.0625	679	0.791	0.534	51	1-FT-1121A	-0.06250	-0.06250	679
53	1-FT-1121A			731			53	1-FT-1121A			731
55	1-FT-1121A	0.0188	-0.0062	748	0.027	0.092	55	1-FT-1121A	0.01875	-0.00625	748
57	1-FT-1121A			701			57	1-FT-1121A			701
59	1-FT-1121A	-0.1875	-0.1875	725	1.965	1.516	59	1-FT-1121A	-0.18750	-0.18750	725
63	2-FT-1111	0.1250	0.0625	746	0.971	0.447	63	2-FT-1111	0.12500	0.06250	746
65	2-FT-1111	0.0000	0.0625	698	0.204	0.447	65	2-FT-1111	0.00000	0.06250	698
67	2-FT-1111	0.0000	0.0000	720	0.204	0.043	67	2-FT-1111	0.00000	0.00000	720
69	2-FT-1111	0.1250	0.0625	693	0.971	0.447	69	2-FT-1111	0.12500	0.06250	693
71	2-FT-1111	-0.1250	-0.0625	36	1.378	0.534	71	2-FT-1111	-0.12500	-0.06250	36
73	2-FT-1111	0.0000	0.0000	814	0.204	0.043	73	2-FT-1111	0.00000	0.00000	814
77	2-FT-1111A	0.0000	0.0625	746	0.204	0.447	77	2-FT-1111A	0.00000	0.06250	746
79	2-FT-1111A	0.0000	0.0000	698	0.204	0.043	79	2-FT-1111A	0.00000	0.00000	698
81	2-FT-1111A	-0.0625	-0.0625	720	0.791	0.534	81	2-FT-1111A	-0.06250	-0.06250	720

Drift Analysis
Rosemount 3051CD4 Series
Differential Pressure Transmitters
Outliers & Summary

Seq. ID	Tag Number	Drift (Pt 1) (80% Up) (%Span)	Drift (Pt 2) (100% Up) (%Span)	Cal Interval (Days)
85	2-FT-1111A	-0.0625	-0.0625	709
89	2-FT-1121	0.0000	0.0000	746
91	2-FT-1121	0.0000	-0.0625	698
93	2-FT-1121	0.0625	-0.0625	720
95	2-FT-1121	0.0000	0.1250	729
97	2-FT-1121	-0.1250	-0.1875	814
101	2-FT-1121A	0.0000	-0.0625	746
103	2-FT-1121A	0.0625	0.0625	698
105	2-FT-1121A	-0.0625	-0.1250	720
107	2-FT-1121A	0.1875	0.1875	752
109	2-FT-1121A	0.0625	0.0000	709

Ext. Stud. Deviate Point 1 (80% Up)	Ext. Stud. Deviate Point 2 (100% Up)
0.791	0.534
0.204	0.043
0.204	0.534
0.384	0.534
0.204	0.938
1.378	1.516
0.204	0.534
0.384	0.447
0.791	1.025
1.558	1.429
0.384	0.043

Equation for Each Studentized Deviate: T= |Drift-Mean|/Std. Dev.

Raw Data ID#	Tag Number	Final Drift Data (Pt 1) (80% Up) (%Span)	Final Drift Data (Pt 2) (100% Up) (%Span)	Cal Interval (Days)
85	2-FT-1111A	-0.06250	-0.06250	709
89	2-FT-1121	0.00000	0.00000	746
91	2-FT-1121	0.00000	-0.06250	698
93	2-FT-1121	0.06250	-0.06250	720
95	2-FT-1121	0.00000	0.12500	729
97	2-FT-1121	-0.12500	-0.18750	814
101	2-FT-1121A	0.00000	-0.06250	746
103	2-FT-1121A	0.06250	0.06250	698
105	2-FT-1121A	-0.06250	-0.12500	720
107	2-FT-1121A	0.18750	0.18750	752
109	2-FT-1121A	0.06250	0.00000	709

Initial Drift Data Statistics Summary Prior to Outlier Removal		
Data Pt.	1	2
Mean	0.0217	0.0055
Variance	0.0113	0.0162
Median	0.00000	0.00000
Std. Dev.	0.1064	0.1273
Count	43	43
Maximum	0.43750	0.50000
Minimum	-0.18750	-0.25000
Range	0.62500	0.75000
Sum	0.93125	0.23750
Kurtosis	4.911	4.742
Skewness	1.521	1.451
Mean+2*StD	0.2345	0.2602
Critical T	2.96	2.96

Crit T Value Lookup (5% Significance), per Sample Size.
(Crit T Values from Reference 3.1.3 for less than 50 samples)

Final Drift Data Statistics Summary After Outlier Removal		
Data Pt.	1	2
Mean	0.0118	-0.0062
Variance	0.0073	0.0105
Median	0.00000	0.00000
Std. Dev.	0.0853	0.1025
Count	42	42
Maximum	0.25000	0.25000
Minimum	-0.18750	-0.25000
Range	0.43750	0.50000
Sum	0.49375	-0.26250
Kurtosis	1.202	1.065
Skewness	0.428	0.341
|Mean|+2*StD	0.1824	0.2112

Calibration point 2 chosen as worst case.

Noted Outliers (Removed All that are detected)
Sequence ID 27 for both calibration points.

Drift Values	"i"	a_{n-i+1} *	b_i (Per Step 4)
-0.25000	1	0.3917	0.195850
-0.18750	2	0.2701	0.118169
-0.18750	3	0.2345	0.087938
-0.12500	4	0.2085	0.052125
-0.12500	5	0.1874	0.036309
-0.07500	6	0.1694	0.023293
-0.06250	7	0.1535	0.019188
-0.06250	8	0.1392	0.017400
-0.06250	9	0.1259	0.015738
-0.06250	10	0.1136	0.014200
-0.06250	11	0.102	0.012750
-0.06250	12	0.0909	0.011363
-0.06250	13	0.0804	0.010050
-0.06250	14	0.0701	0.008762
-0.06250	15	0.0602	0.003762
-0.06250	16	0.0506	0.003162
-0.06250	17	0.0411	0.002569
-0.06250	18	0.0318	0.001987
-0.00625	19	0.0227	0.000142
0.00000	20	0.0136	0.000000
0.00000	21	0.0045	0.000000
0.00000			
0.00000			
0.00000			
0.00000			
0.00000			
0.00000			
0.00000			
0.06250			
0.06250			
0.06250			
0.06250			
0.06250			
0.06250			
0.06250			
0.06250			
0.06250			
0.06250			
0.06875			
0.12500			
0.18750			
0.25000			
0.25000			

b = 0.6348
(Per Step 4)
* From Table 1 of Ref. 3.1.7.

Specific W Normality Test Methodology from Reference 3.1.6 and Section C.2 of Reference 3.1.3

Steps to Perform:

1. Paste all final drift data into column 1.
2. Sort in ascending order.
3. Calculate S^2 taking the variance of the drift data adjusted by (Count-1)

$$S^2 = (n-1)(\text{Variance (Drift)})$$

where: n = Count

4. Calculate the Quantity b:

$$b = \text{Sum}[(a_{n-i+1})(x_{n-i+1} - x_i)]$$

where: i = 1 to k
k = (n)/2
x_i = Drift value at point number i
a_{n-i+1} values are taken from Table 1 of Reference 3.1.6.

Calculate b^2.
Compute the W Statistic and compare to the critical value at the 5% confidence level. The table of critical values is given as Table 2 on page 9 of Reference 3.1.6.

$$W = b^2/S^2$$

Results:
Since the W statistic, 0.9357, is less than the critical value for W, 0.942, this test rejects the assumption of normality for this data set.

Computed Values

S^2 =	0.4306	
b =	0.6348	
b^2 =	0.4029	
Count (n):	42	
$W = b^2/S^2$ =	0.9357	
W Critical =	0.942	5% Significance From Table 2 of Reference 3.1.6.

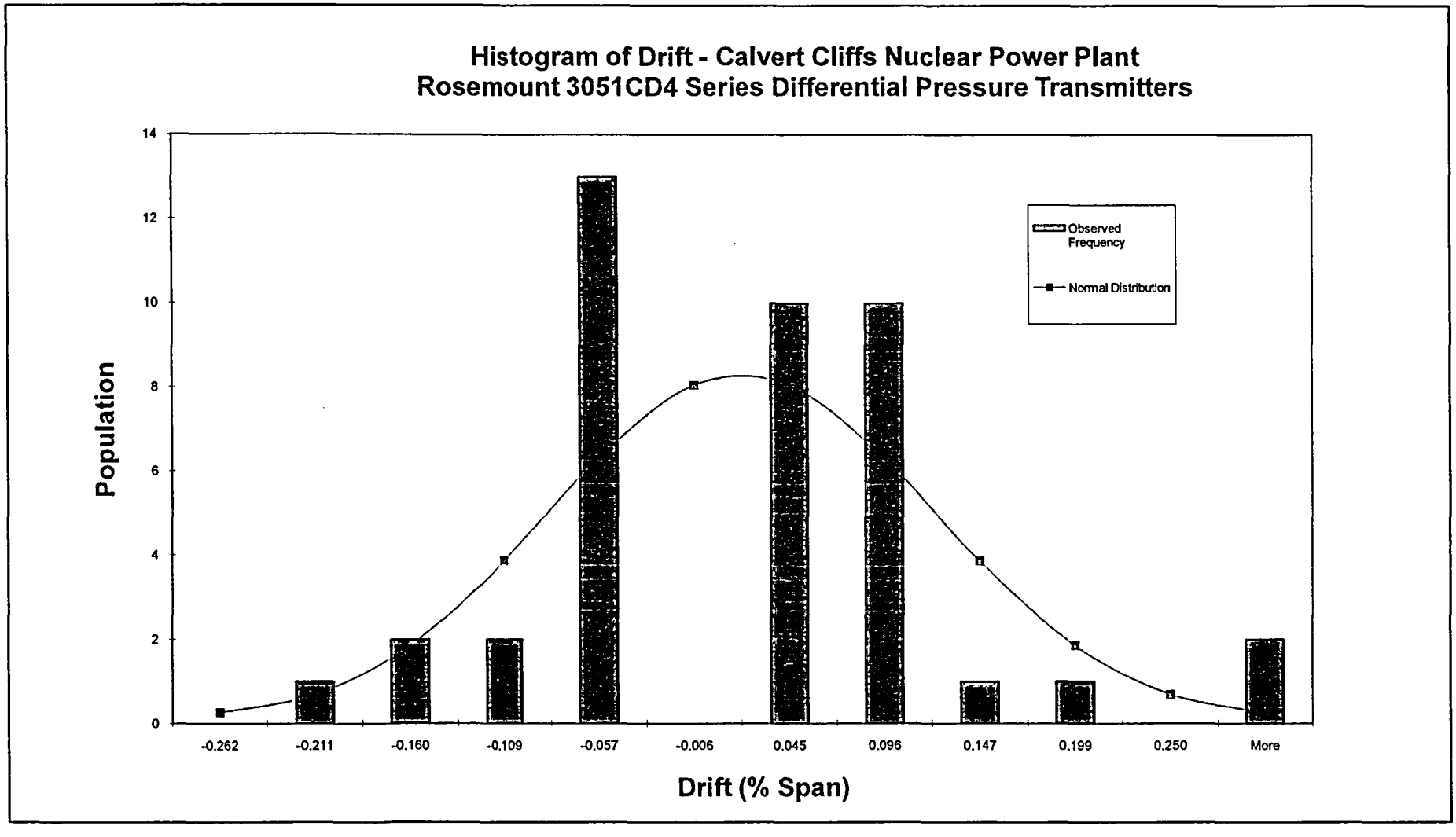
Bin No.	Bin Descriptions	No. StDev (NS)	Bin Maximums = Mean + (NS*StDev)	Observed Frequency	Cumulative Probability (CP_i) (Table B-2 Ref 3.1.4)	Normal Distribution Probability ($Pnorm = CP_r - CP_{r-1}$)	Expected Frequency (Ei = Pnorm*N)
1	Up to - 2.5 Standard Deviations from Mean	-2.5	-0.262	0	0.0062	0.0062	0.2604
2	-2.5 to -2.0 Standard Deviations from Mean	-2.0	-0.211	1	0.0228	0.0166	0.6951
3	-2.0 to -1.5 Standard Deviations from Mean	-1.5	-0.160	2	0.0668	0.0441	1.8501
4	-1.5 to -1.0 Standard Deviations from Mean	-1.0	-0.109	2	0.1587	0.0919	3.8577
5	-1.0 to -0.5 Standard Deviations from Mean	-0.5	-0.057	13	0.3086	0.1499	6.2958
6	-0.5 Standard Deviations from Mean to Mean	0.0	-0.006	0	0.5000	0.1915	8.0409
7	Mean to +0.5 Standard Deviations from Mean	0.5	0.045	10	0.6915	0.1915	8.0409
8	+0.5 to +1.0 Standard Deviations from Mean	1.0	0.096	10	0.8414	0.1499	6.2958
9	+1.0 to +1.5 Standard Deviations from Mean	1.5	0.147	1	0.9332	0.0919	3.8577
10	+1.5 to +2.0 Standard Deviations from Mean	2.0	0.199	1	0.9773	0.0441	1.8501
11	+2.0 to +2.5 Standard Deviations from Mean	2.5	0.250	0	0.9938	0.0166	0.6951
12	More than Mean + 2.5 Standard Deviations	More	More	2	1.0000	0.0062	0.2604
			Totals	42			42

+/- Sigma Bounds	Observed Drift Values	Observed Percentages	Percentage for Normal Distribution
2.5 (Bins 2-11)	40	95.24%	
2 (Bins 3-10)	39	92.86%	95.45%
1.5 (Bins 4-9)	36	85.71%	
1 (Bins 5-8)	33	78.57%	68.27%
0.5 (Bins 6-7)	10	23.81%	

Mean	-0.0062
Std. Dev.	0.1025
Sample Size	42

Methodology for Histogram Taken from Section C.5 of Reference 3.1.3

1. Order the drift data in ascending order.
2. Obtain mean, standard deviation, and sample size.
3. Establishing bins in 1/2 sigma increments from the mean to 2.5 sigma in both directions, derive the upper bin limits, in units of drift, based on the values of the mean and standard deviation.
4. Obtain expected frequency for a normal distribution in each bin.
5. Manually compute the number of observed drift data points within each bin, and list under observed frequency.
6. Plot the Expected Frequency and the Observed Frequency Data on the Histogram for comparison to each other.
7. Compare the population percentages within 2 Standard Deviation bounds, and provide a Normality Adjustment Factor to increase the Standard Deviation until adequate percentages exist.


Histogram of Drift - Calvert Cliffs Nuclear Power Plant
Rosemount 3051CD4 Series Differential Pressure Transmitters
Population
14
12
10
8
6
4
2
0
Observed Frequency
Normal Distribution
-0.262
-0.211
-0.160
-0.109
-0.057
-0.006
0.045
0.096
0.147
0.199
0.250
More
Drift (% Span)

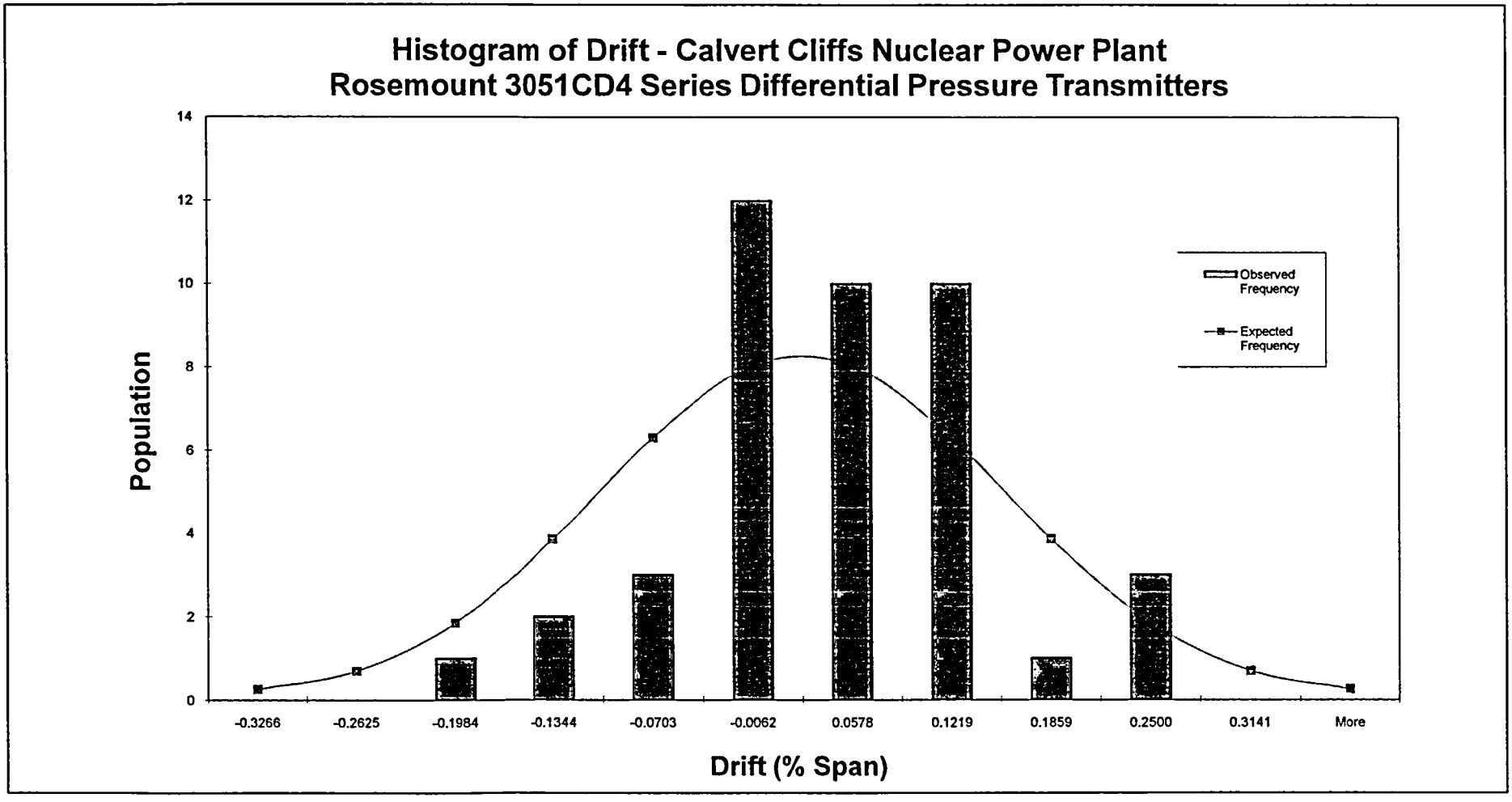
AFTER ADJUSTMENT

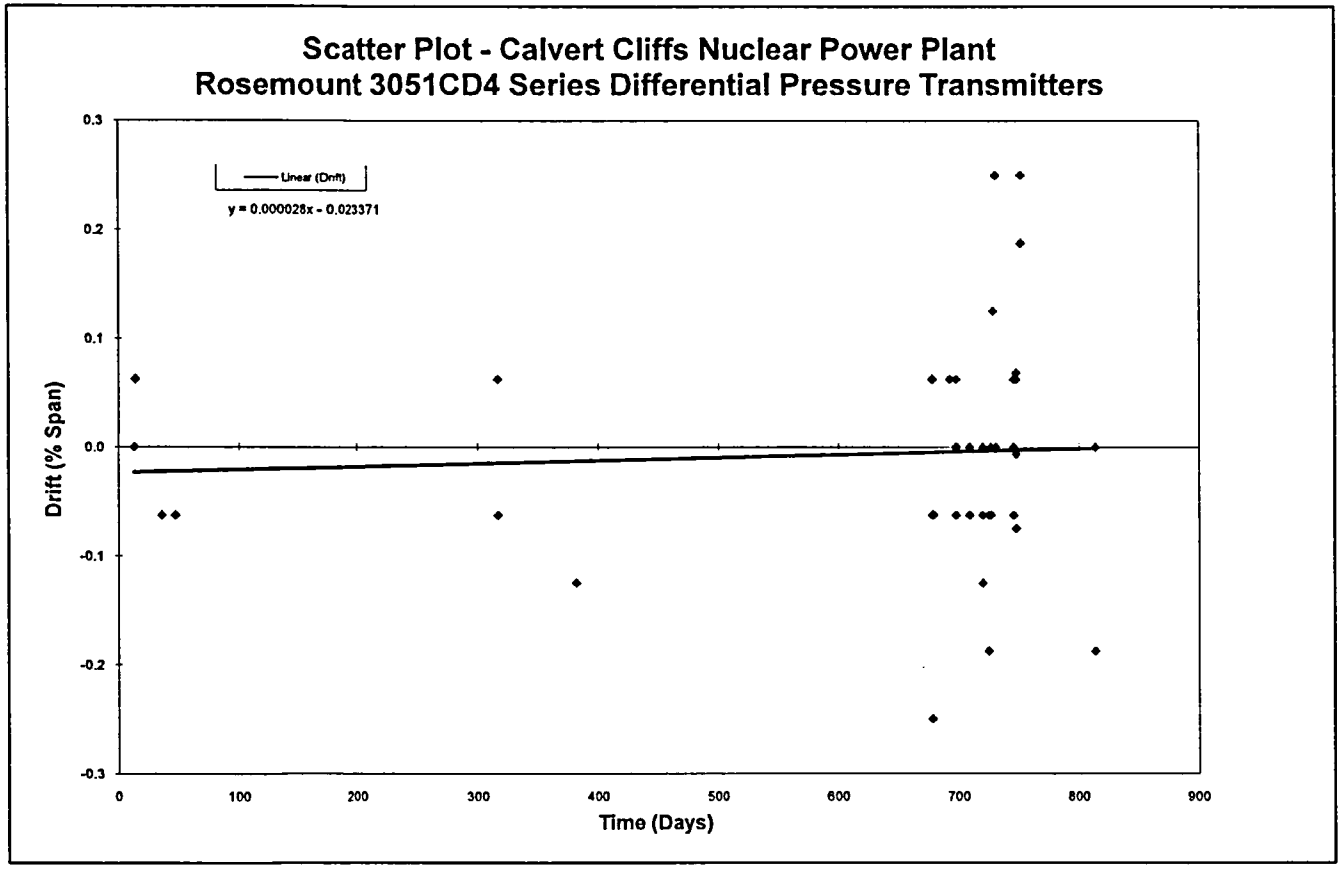
Bin No.	Bin Descriptions	No. StDev (NS)	Bin Maximums = Mean + (NS*StDev)	Observed Frequency	Expected Frequency
1	Up to - 2.5 Standard Deviations from Mean	-2.5	-0.3266	0	0.2604
2	-2.5 to -2.0 Standard Deviations from Mean	-2.0	-0.2625	0	0.6951
3	-2.0 to -1.5 Standard Deviations from Mean	-1.5	-0.1984	1	1.8501
4	-1.5 to -1.0 Standard Deviations from Mean	-1.0	-0.1344	2	3.8577
5	-1.0 to -0.5 Standard Deviations from Mean	-0.5	-0.0703	3	6.2958
6	-0.5 Standard Deviations from Mean to Mean	0.0	-0.0062	12	8.0409
7	Mean to +0.5 Standard Deviations from Mean	0.5	0.0578	10	8.0409
8	+0.5 to +1.0 Standard Deviations from Mean	1.0	0.1219	10	6.2958
9	+1.0 to +1.5 Standard Deviations from Mean	1.5	0.1859	1	3.8577
10	+1.5 to +2.0 Standard Deviations from Mean	2.0	0.2500	3	1.8501
11	+2.0 to +2.5 Standard Deviations from Mean	2.5	0.3141	0	0.6951
12	More than Mean + 2.5 Standard Deviations	More	More	0	0.2604
			Totals	42	42

+/- Sigma Bounds	Observed Drift Values	Observed Percentages	Percentage for Normal Distribution
2.5 (Bins 2-11)	42	100.00%	
2 (Bins 3-10	42	100.00%	95.45
1.5 (Bins 4-9)	38	90.48%	
1 (Bins 5-8)	35	83.33%	68.27
0.5 (Bins 6-7)	22	52.38%	

	Values w/ Adjusted Std. Dev.
Mean	-0.0062
Std. Dev.	0.1281
Sample Size	42
NAF	1.2502

Results: The initial analysis showed that the observed data population within the +/- 2 sigma value was very near the typical population for a normal distribution, and therefore, the distribution of the data can be conservatively treated as normal if an adjustment factor is used. The standard deviation was adjusted upward by a multiplication factor of 1.2502 to provide the required coverage at the 2 sigma value. (The adjustment factor was determined iteratively.)


Histogram of Drift - Calvert Cliffs Nuclear Power Plant
Rosemount 3051CD4 Series Differential Pressure Transmitters
Population
14
12
10
8
6
4
2
0
-0.3266
-0.2625
-0.1984
-0.1344
-0.0703
-0.0062
0.0578
0.1219
0.1859
0.2500
0.3141
More
Drift (% Span)
Observed Frequency
Expected Frequency


Scatter Plot - Calvert Cliffs Nuclear Power Plant
Rosemount 3051CD4 Series Differential Pressure Transmitters
Linear (Drift)
y = 0.000028x - 0.023371
Drift (% Span)
0.3
0.2
0.1
0.0
-0.1
-0.2
-0.3
0
100
200
300
400
500
600
700
800
900
Time (Days)

Bin Statistics

	Bin 1	Bin 2	Bin 3	Bin 4	Bin 5	Bin 6	Bin 7
Count	4	1		3	4	30	
Standard Dev.	0.0510	NA		0.0955	0.1288	0.1052	
Mean	0.0000	-0.0625		-0.0417	-0.0781	0.0079	
Mean Interval	19.0000	47.0000		338.6667	678.2500	732.8667	
Max Interval	36	47		382	679	814	

Bin Definition and Selection

Bins	Bin Hi Limit (Days)	Bin Count	Population Percentage	Valid Bins Included
1	45	4	9.5%	
2	135	1	2.4%	
3	230	0	0.0%	
4	460	3	7.1%	
5	690	4	9.5%	
6	915	30	71.4%	6
7	Over	0	0.0%	

Drift Bias Determination

Per Outlier Statistical Summary,

Count (N)	42	Drift Data Points
Drift Bias Term (Mean)	-0.0062	% Span
Drift Bias Term (Mean) for Bin 6	0.0079	% Span
Standard Deviation of FDS (Stdev)	0.1025	% Span
Standard Deviation of Bin 6 (Stdev)	0.1052	% Span
Ratio StDev/|Mean| of FDS	16.3975	
Ratio StDev/|Mean| of Bin 6	13.2898	

The magnitude of the mean value of drift is less 1/13 the value of the standard deviation. When used in undertainty analysis as a random term, the standard deviation will be multiplied by at least a factor of 2. Therefore, the mean is negligible in comparison to the random portion of drift, and will be considered to be zero.

Random Drift Determination

Count (N)	42	Drift Data Points	
Standard Deviation from Bin 6 (Stdev)	0.1052	% Span	(Conservatively Used, since it is larger than Stdev of Final Data Set.
Standard Deviation of Final Data Set	0.1025	% Span	
Bin 6 Average Time Interval (Days)	732.8667	Days	
Bin 6 Average Time Interval (Hours)	17588.8	Hours	(Days x 24 hours / day)
Normality Adjustment Factor (NAF)	1.2502		(From Coverage Analysis)
Tolerance Interval Factor (TIF)	2.445		(For greater than or equal to 40 samples) From Table VII (a) of Reference 3.1.4

[Drift = Stdev * TIF * NAF]

$D_{random\ (24\ Mo)}$ = +/- 0.3216 % Span (For up to 24 Months - Nominal Calibration Interval)

Application to Allowed Outage Time (AOT) for Ultrasonic Flow Meters (UFMs)

Proposed AOT Interval: 72 hours

Interpolating drift by SRSS,

[$Drift_{(72\ Hr)} = D_{Random\ (24\ Mo)}$*(Reqd Time/Bin 6 Average Time Interval)$^{1/2}$

$D_{random\ (72\ Hr)}$ = +/- 0.0206 % Span

Impact on Thermal Power Computations

There are two transmitters per Unit, one transmitter per FW header. If both transmitters per unit erred im the same direction, the same amount, we would obtain the following.

Nominal Flow Limits 100%	5932 klbm/hr	(Per Generator)	
	6178 klbm/hr	(Per Generator)	
Transmitter Scaled	0 klbm/hr	to	6500 klbm/hr

[XmtrSpan = (Flow Rate/Full Flow Rate)^2

Conservatively Using Lower Limit for Conv. 83.2867% Xmtr Span
Conservatively treating the correllation between FW Flow and Power as 1:1, the error is computed as follows:

Erred Output = Lower Limit - [Drift $_{random\ (72\ Hr)}$]

Erred Output = 83.2661% % Span

Converting to Flow Rate

Erred Flow Rate = (Erred Output)$^{0.5}$ * 6500

Erred Flow Rate = 5931.26719 klbm/hr

Impact on Thermal Power Computation if both transmitters err same direction at same time.

Thermal Power Error = [(Erred Flow Rate - Lower Limit)/Lower Limit]*100% RTP

Thermal Power Error = -0.0123535 % RTP 2744 MWth
= -0.34 MWth

Impact on Thermal Power Computation if both transmitters err randomly.

Thermal Power Error = [sqrt(2)/2]*[(Erred Flow Rate - Lower Limit)/Lower Limit]*100% RTP

Thermal Power Error = -0.0087352 % RTP 2744 MWth
= -0.24 MWth

Operating Comparison of Venturi-Based Feedwater Flow Indications to AMAG Ultrasonic Flow Meter Indications

INTRODUCTION

To implement an Appendix K Uprate, CCNPP is planning to install the Caldon CheckPlus Feedwater (FW) Flow Monitoring System. With increased accuracy of FW flow, the accuracy of the secondary calorimetric will be enhanced. In short, the CCNPP units will be allowed to operate closer to operating limits, due to increased accuracy of plant power level measurement. As a part of this installation, an Acceptable Outage Time (AOT) for the Ultrasonic Flowmeters (UFMs) must be established for continued operation without reducing power.

During normal operation, the UFMs will be used to measure the FW Flow, which will be used to determine the secondary calorimetric power. In addition the UFMs are to be used to correct the venturi-based FW Flow measurement during normal operation. If the UFMs become inoperable, the venturi-based FW Flow measurement would be used instead. If the UFM goes inoperable, the FW Flow measurement would no longer be corrected. Over time, this could cause a loss in accuracy, which could ultimately invalidate the error analysis for the Secondary Calorimetric power computation.

The purpose of this appendix is to assess the stability of the venturi-based FW Flow measurement, so that the AOT can be shown to be adequate for this application.

SCOPE

The scope of this assessment is specific to the venturi-based FW Flow instrumentation; specifically, plant computer indications associated with transmitters 1(2)-FT-1111 and 1(2)-FT-1121 and the existing installed AMAG Ultrasonic Flow Meters.

METHODOLOGY

Originally, in order to implement this project, AMAG Ultrasonic Flow Meters were installed at Calvert Cliffs for both units. Now, these UFMs will be replaced, using the Caldon LEFM CheckPlus ultrasonic flow measurement system. At relatively steady state conditions, AMAG can be used for trending, when averaged over time (Assumption 1). Therefore, comparison of the venturi-based FW Flow indications to the averaged AMAG indications is useful in assessing the stability of the venturi-based FW Flow indications.

At the time the UFMs go inoperable; the correction factors will cease to be implemented on the venturi-based FW flow measurements. The purpose of the corrections to the venturi-based flow signals is to provide increased accuracy to the signals, based on the highly accurate UFMs. Therefore, the loss of the correction factor adjustments could

cause a slight decrease in accuracy of the venturi-based FW flow measurement over time. This potential decrease in accuracy will be termed the "lost accuracy." This study computes a "lost accuracy" value which conservatively includes 1) the AMAG Ultrasonic Flow Meters and associated plant computer indications, 2) process noise and fluctuations, 3) venturis, and 4) flow transmitters and associated plant computer indications. Therefore, the term computed herein is NOT comparable with transmitter drift, and is not intended to be construed as such.

In accordance with the previous design (AMAG), correction factors were planned to be implemented hourly to the venturi-based flow signal, based on the rolling, most recent, 24 hours average correction factor, as computed continuously from comparison to the AMAG signals (Assumption 2). This approach was based on smoothing the variation in the AMAG signals and ensuring that the average outputs of the venturis match the average output from the UFMs. This approach will be used in the analysis of the historical data, to determine the lost accuracy in the uncorrected venturi-based flow signal over the AOT interval.

One proposed requirement on the AOT is that during the AOT interval, power may not change by more than 10% RTP. This requirement is generally invoked to ensure that steady state conditions are maintained. The general concern for this project is that power stay below 102% RTP. Therefore, for the data collected for analysis, operation will be generally analyzed for 100% power conditions, and must be above 90% RTP at all times.

In order to analyze the full AOT time period, data in excess of three days should be analyzed for any given grouping. For conservatism, five days of operation in October 2007 and five days of operation in October 2008 were chosen for each unit, for each header flow measurement for analysis. The days were chosen at random, but were ensured to show 100% RTP operation in general and greater than 90% RTP at all times. It was also verified that only high quality readings from the AMAG and venturi-based flow signals were used, in order to provide a good basis for analysis.

The plant computer data is provided at 2 minute intervals. For this analysis, to provide the most appropriate comparisons, the proposed approach for correction factors with the AMAG system is simulated. Therefore, correction factors are computed for the venturi-based flow signal, based on the comparison in the average readings of the

venturi versus the AMAG UFMs. The correction factor is based on a rolling 24 hour average in computed correction factors for the configuration, computed every hour. The correction factor is merely the ratio of the AMAG flow indication to the venturi-based flow indication.

To determine the overall flow rate (both generators), the average correction factor is computed, based on a simple average of the correction factors from each header (Assumption 3). Statistical analysis is performed on the computed correction factors to determine the variation in those average correction factors.

The standard deviation of the correction factors is multiplied by two to determine a random uncertainty (lost accuracy) in the correction factor occurring over a 4 day period (5 days minus 24 hours), which conservatively encompasses the 72 hour proposed AOT. This lost accuracy is compared to the overall uncertainty of the Secondary Calorimetric computation to determine if the error is significant.

In addition, a comparison is made of the standard deviation of the flow indication of the AMAG UFM to those of the venturi-based flow indications; based on the originally supplied 2 minute average readings.

ASSUMPTIONS / LIMITATIONS / GIVENS

1. At relatively steady state conditions, AMAG can be used for trending, when averaged over time, but can vary significantly over short time intervals. This is due to the inherent operation of the AMAG devices. Other sources of variation in both the venturi-based FW flow signals and the AMAG signals could include process variations in Feedwater Flow and noise.
2. During the planning for the AMAG UFMs (before the change in design to the Caldon UFMs), correction factors were planned to be implemented hourly to the venturi-based flow signal, based on the rolling, most recent, 24 hours average correction factor, as computed continuously from comparison to the AMAG signals. This approach was based on smoothing the variation in the AMAG signals and ensuring that the average outputs of the venturis match the average output from the UFMs.
3. It is assumed that the flow rates from each generator are approximately the same. This allows the correction factors to be averaged for the two generators, in determining the total flow rate for its impact on the power measurement.

4. It is conservatively assumed that FW flow is a 1:1 contributor to the secondary calorimetric power computation, such that the computed % Flow error can be converted to % RTP error simply by multiplying by 1. This is conservative, since other error contributors exist, which affects the power computation; and therefore, the actual conversion factor is slightly less than 1.
5. The final overall accuracy of the secondary calorimetric computation of reactor power is conservatively estimated to be approximately 0.4% RTP (or very slightly less), thus allowing a potential 1.6% power uprate. This is conservative, since it provides a total power error less than the currently computed value. The smaller the total uncertainty value, the larger the lost accuracy will show in the comparison.

ANALYSIS

In order to analyze the full AOT time period, five days of operation in October 2007 and five days of operation in October 2008 were chosen for each unit, for each header flow measurement for analysis. The days were chosen at random, but were ensured to contain operation at greater than 90% power and high quality readings from the AMAG and venturi-based flow. This should provide adequate data for establishing the stability of the venturi-based flow reading, in comparison to the UFM signal. The UFM and venturi-based flow data, as well as the plant computer based correction factors, have been supplied from the plant computer, in approximate 2 minute intervals.

Signals and quality of signals were supplied from the plant computer. The data was labeled as Fv for the venturi-based flow indication, Fui for the AMAG UFM flow "instantaneous indication", and CF for the correction factor. Certain data was periodically shown as poor quality, but was normally only labeled as such on one computer pass at a time. The data without good quality was eliminated from the information analyzed.

A statistical summary of the supplied data is provided as page 1 of Attachment 1. The standard deviation, average, maximum, minimum, median, and count were computed for the Fv, Fui, and CF for each set of data. It is observed that the Fv signals have a significantly lower standard deviation than the Fui, showing that the instantaneous readings from the venturi-based flow signals are more stable than the AMAG UFM flow signals. Pages 2 through 25 of Attachment 1 provide a tabulation of the 24 hour averages of the Fv, Fui and CFs for each header in each unit for 2007 and 2008 data.

In addition to the variables listed above, a computation was made for the "Dev Using Init CF" column on pages 2 through 25. This column is a listing of the deviations of the average venturi-based flow signal from the AMAG flow signal, if the initial correction factor (computed at time = 24 hours into the study period) was applied, all through the remainder of the study period of 5 days. This data provides additional justification of the approach used within this analysis. The values within this column of data are computed as follows:

$$\text{Dev} = \frac{(CF_{f=24hr} \times Fv) - Fui}{Fui}$$

The statistical summaries for each of these sets of data are provided on pages 4, 7, 10, 13, 16, 19, 22 and 25. Page 26 provides a tabulated summary of all of the individual data set summaries. Note on page 26 that the standard deviations of the "Avg CF" and the "Dev Using Init CF" data is very similar, and the difference is negligible. Therefore, the analysis of the Avg CF values appropriately demonstrates the errors in the venturi-based FW flow signals, upon a loss of correction factor, for the time interval studied.

Pages 27 and 28 of Attachment 1 provide the average CF values for Unit 1 in 2007, as computed at one hour intervals. These averages are taken by a simple average of the computed CFs for each header. The statistical data for the CFs is shown on page 28 of Attachment 1. Likewise, the Unit 1 2008 information is provided on pages 29 and 30 of Attachment 1, the Unit 2 2007 information is provided on pages 31 and 32 of Attachment 1, and the Unit 2 2008 information is provided on pages 33 and 34 of Attachment 1. Page 35 of Attachment 1 provides statistical summaries for the CFs for each unit for each year.

The standard deviation in the CF is the worst case for the 2007 Unit 1 data, equal to 0.000191. Since errors are generally expressed as 2 standard deviations, the percent error is computed as follows:

$$\text{Error} = \left[2 \times \left(\frac{0.000191}{1}\right) \times (100\% \text{ Flow})\right] = 0.0382\% \text{ Flow}$$

Per Assumption 4, this error is conservatively converted to % RTP in the secondary calorimetric power computation by multiplying by 1. Therefore,

$$\text{Lost Accuracy} = 1 \times 0.0382\% \text{ Flow} = 0.0382\% \text{ RTP}$$

The overall accuracy of the secondary calorimetric computation of reactor power is conservatively estimated to be approximately 0.4% RTP (or very slightly less), thus allowing a potential 1.6% power uprate (Assumption 5). The lost accuracy in the flow signals is compared to the overall accuracy of the UFM flow readings to show that the lost accuracy for a 72 hour AOT is less than 1/10th in comparison to the overall accuracy. Per Section 6.2.6.1 of ISA-RP67.04.02-2000, precedent is set for Measurement & Test Equipment effect, such that if the error of M&TE error is less than 1/10th the error of the equipment being calibrated, the M&TE error can be neglected. This is due to the fact that for random errors, the following relationship is shown to be the case, for an error equal to a value, a; being combined with another error, equal to the quantity, a/10.

$$\text{Total Error} = \sqrt{a^2 + \left(\frac{a}{10}\right)^2} = \sqrt{1.01 \times a^2} < 1.005 \times a$$

Thus the lost accuracy increases the overall uncertainty of the Secondary Calorimetric computation by less than 0.5% of the original Secondary Calorimetric uncertainty of 0.4% RTP, which is considered negligible.

Therefore, a random error equal to approximately 1/10th the total random error only impacts the error by a very small amount, which could be considered negligible. Thus, since the lost accuracy increases the overall uncertainty of the Secondary Calorimetric computation by less than 0.5% of the original Secondary Calorimetric uncertainty of 0.4% RTP, this lost accuracy can be considered negligible. The power level would not need to be reduced for at least 72 hours after loss of the UFM signals.

Operating Comparison of Venturi-Based Feedwater Flow Indications to AMAG Ultrasonic Flow Meter Indications

RESULTS

Based on a comparison of the AMAG UFM flow indications and the venturi-based flow indications,

- It is observed that the instantaneous readings from the venturi-based flow signals are more stable than the instantaneous AMAG UFM flow signals.
- The lost accuracy of the venturi-based flow signal due to the loss of the UFMs to provide a correction factor is less than 1/10th the total accuracy of the secondary calorimetric uncertainty. Since this lost accuracy increases the overall uncertainty of the Secondary Calorimetric computation by less than 0.5% of the original Secondary Calorimetric uncertainty of 0.4% RTP, this lost accuracy can be considered negligible.

Notes:

1. The computations are performed for up to 4 days (96 hours) at a time, instead of 72 hours. Thus, it is concluded that this stability analysis could apply for significantly longer times, but 72 hours is considered to be appropriate.
2. This "lost accuracy" value conservatively includes 1) the AMAG Ultrasonic Flow Meters and associated plant computer indications, 2) process noise and fluctuations, 3) venturis, and 4) flow transmitters and associated plant computer indications. Therefore, the term computed herein is NOT comparable with transmitter drift, and is not intended to be construed as such.

RECOMMENDATIONS

It is recommended that the Allowed Outage Time be set to 72 hours for implementation of the Caldon Ultrasonic Flow Measurement system for Calvert Cliffs Nuclear Power Plant.

ATTACHMENTS

Attachment 1 – 35 pages

Unit 1, Header 11, 2007

	Avg Fv	Avg Fui	Avg CF
Max	5960.473	6072.923	1.027590
Min	5846.238	5739.880	0.967820
Range	114.235	333.043	0.059770
Median	5923.820	5894.329	0.995715
Average	5917.855	5892.603	0.995736
StDev	21.411	46.330	0.007379
Count	3702	3702	3702

Unit 1, Header 12, 2007

	Avg Fv	Avg Fui	Avg CF
Max	5911.180	5985.540	1.020600
Min	5782.992	5735.837	0.979960
Range	128.188	249.703	0.040640
Median	5877.049	5865.798	0.998830
Average	5871.937	5865.081	0.998835
StDev	19.958	36.963	0.005704
Count	4100	4100	4100

Unit 1, Header 11, 2008

	Avg Fv	Avg Fui	Avg CF
Max	5952.926	6075.599	1.025020
Min	5884.320	5736.477	0.967840
Range	68.606	339.122	0.057180
Median	5927.332	5903.554	0.995955
Average	5927.188	5903.387	0.995987
StDev	8.903	43.478	0.007470
Count	3602	3602	3602

Unit 1, Header 12, 2008

	Avg Fv	Avg Fui	Avg CF
Max	5888.938	5952.320	1.015800
Min	5825.242	5703.721	0.974130
Range	63.696	248.599	0.041670
Median	5868.334	5852.991	0.997425
Average	5868.157	5853.289	0.997468
StDev	7.369	33.940	0.005912
Count	3958	3958	3958

Unit 2, Header 21, 2007

	Avg Fv	Avg Fui	Avg CF
Max	6037.801	6140.434	1.020810
Min	5986.156	5940.721	0.989370
Range	51.645	199.713	0.031440
Median	6009.703	6040.093	1.005090
Average	6009.743	6040.302	1.005086
StDev	6.423	26.753	0.004520
Count	4139	4139	4139

Unit 2, Header 22, 2007

	Avg Fv	Avg Fui	Avg CF
Max	5944.547	6100.366	1.030540
Min	5898.898	5839.607	0.985480
Range	45.649	260.759	0.045060
Median	5922.922	5966.977	1.007430
Average	5922.871	5966.713	1.007403
StDev	5.638	34.771	0.005922
Count	4111	4111	4111

Unit 2, Header 21, 2008

	Avg Fv	Avg Fui	Avg CF
Max	6044.156	6165.574	1.025980
Min	5964.957	5950.614	0.989620
Range	79.199	214.960	0.036360
Median	6004.313	6038.228	1.005580
Average	6004.612	6038.124	1.005584
StDev	9.680	27.331	0.004775
Count	4162	4162	4162

Unit 2, Header 22, 2008

	Avg Fv	Avg Fui	Avg CF
Max	5962.719	6089.016	1.032980
Min	5885.297	5825.887	0.982970
Range	77.422	263.129	0.050010
Median	5918.266	5958.596	1.006740
Average	5918.141	5958.218	1.006774
StDev	9.020	36.475	0.006292
Count	4112	4112	4112

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/1/2007 0:00	10/2/2007 0:00	5882.275073	5857.600299	0.995808129	2.9085E-06
10/1/2007 1:00	10/2/2007 1:00	5884.590192	5860.693161	0.995941895	-0.000131454
10/1/2007 2:00	10/2/2007 2:00	5886.928991	5863.498999	0.996023356	-0.000212715
10/1/2007 3:00	10/2/2007 3:00	5888.81795	5866.192341	0.996161584	-0.000351089
10/1/2007 4:00	10/2/2007 4:00	5890.545746	5867.978593	0.996172416	-0.000362178
10/1/2007 5:00	10/2/2007 5:00	5892.320881	5869.991979	0.996213834	-0.00040391
10/1/2007 6:00	10/2/2007 6:00	5894.009491	5872.658311	0.996380708	-0.000571419
10/1/2007 7:00	10/2/2007 7:00	5895.570001	5874.195295	0.996377818	-0.000568378
10/1/2007 8:00	10/2/2007 8:00	5897.462485	5875.901411	0.996347055	-0.000537845
10/1/2007 9:00	10/2/2007 9:00	5899.321628	5877.433016	0.996292637	-0.000483303
10/1/2007 10:00	10/2/2007 10:00	5901.304737	5879.066523	0.996234813	-0.000425117
10/1/2007 11:00	10/2/2007 11:00	5903.245063	5880.758597	0.996193995	-0.000384164
10/1/2007 12:00	10/2/2007 12:00	5905.332275	5882.957009	0.996214129	-0.00040441
10/1/2007 13:00	10/2/2007 13:00	5907.476128	5885.187373	0.996230228	-0.000420483
10/1/2007 14:00	10/2/2007 14:00	5909.243113	5887.554244	0.996333116	-0.000523463
10/1/2007 15:00	10/2/2007 15:00	5911.128274	5889.329423	0.996315625	-0.000505972
10/1/2007 16:00	10/2/2007 16:00	5912.247405	5889.324575	0.996125794	-0.000315919
10/1/2007 17:00	10/2/2007 17:00	5913.891749	5890.064207	0.995973952	-0.000163449
10/1/2007 18:00	10/2/2007 18:00	5915.639971	5891.473127	0.995918135	-0.000107062
10/1/2007 19:00	10/2/2007 19:00	5917.43845	5893.057487	0.995883351	-7.19787E-05
10/1/2007 20:00	10/2/2007 20:00	5919.180516	5894.157647	0.995776089	3.57013E-05
10/1/2007 21:00	10/2/2007 21:00	5920.718792	5895.879079	0.995808364	3.53216E-06
10/1/2007 22:00	10/2/2007 22:00	5921.982049	5896.721502	0.995737635	7.4001E-05
10/1/2007 23:00	10/2/2007 23:00	5922.880684	5898.135145	0.995825342	-1.39724E-05
10/2/2007 0:00	10/3/2007 0:00	5923.781496	5899.034114	0.995825656	-1.42981E-05
10/2/2007 1:00	10/3/2007 1:00	5924.470352	5899.493169	0.995787304	2.41663E-05
10/2/2007 2:00	10/3/2007 2:00	5925.063737	5899.930083	0.995761487	5.02637E-05
10/2/2007 3:00	10/3/2007 3:00	5925.857497	5900.756925	0.99576749	4.40864E-05
10/2/2007 4:00	10/3/2007 4:00	5926.56203	5900.937834	0.995679523	0.00013232
10/2/2007 5:00	10/3/2007 5:00	5927.337141	5901.195875	0.995593059	0.000219385
10/2/2007 6:00	10/3/2007 6:00	5928.107776	5901.157947	0.995456977	0.000355857
10/2/2007 7:00	10/3/2007 7:00	5928.728186	5902.623515	0.995599814	0.000212144
10/2/2007 8:00	10/3/2007 8:00	5929.497365	5902.327855	0.995421025	0.000392019
10/2/2007 9:00	10/3/2007 9:00	5930.177777	5902.684938	0.995367105	0.000446288
10/2/2007 10:00	10/3/2007 10:00	5930.799681	5903.595718	0.99541643	0.000396846
10/2/2007 11:00	10/3/2007 11:00	5931.072295	5903.347571	0.995328627	0.000484883
10/2/2007 12:00	10/3/2007 12:00	5931.49318	5903.801401	0.995334347	0.000478967
10/2/2007 13:00	10/3/2007 13:00	5931.918147	5904.688061	0.995412699	0.000400403
10/2/2007 14:00	10/3/2007 14:00	5932.357659	5904.807628	0.995358847	0.000454266
10/2/2007 15:00	10/3/2007 15:00	5932.736042	5905.291729	0.995376753	0.000436058
10/2/2007 16:00	10/3/2007 16:00	5932.895818	5905.513754	0.995387442	0.000425387
10/2/2007 17:00	10/3/2007 17:00	5932.895657	5905.675159	0.995414789	0.000398018
10/2/2007 18:00	10/3/2007 18:00	5932.502847	5905.448582	0.995442343	0.000370163
10/2/2007 19:00	10/3/2007 19:00	5932.049417	5905.281404	0.995490218	0.000322022
10/2/2007 20:00	10/3/2007 20:00	5931.403712	5905.359614	0.99561191	0.00019989
10/2/2007 21:00	10/3/2007 21:00	5930.948159	5905.369099	0.995689918	0.000121464
10/2/2007 22:00	10/3/2007 22:00	5930.569679	5904.552613	0.995615978	0.000195931

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/2/2007 23:00	10/3/2007 23:00	5930.256547	5903.700809	0.995524843	0.000287425
10/3/2007 0:00	10/4/2007 0:00	5929.828059	5902.910406	0.995463576	0.000349079
10/3/2007 1:00	10/4/2007 1:00	5929.446763	5902.557976	0.995468089	0.00034448
10/3/2007 2:00	10/4/2007 2:00	5929.224507	5901.999269	0.995411071	0.000401677
10/3/2007 3:00	10/4/2007 3:00	5928.965419	5901.644626	0.995394959	0.000418076
10/3/2007 4:00	10/4/2007 4:00	5928.59529	5901.653821	0.995458878	0.000354064
10/3/2007 5:00	10/4/2007 5:00	5928.125992	5901.337973	0.995484163	0.000328414
10/3/2007 6:00	10/4/2007 6:00	5927.681218	5901.055331	0.99551132	0.00030127
10/3/2007 7:00	10/4/2007 7:00	5927.3658	5900.460959	0.995464313	0.000348801
10/3/2007 8:00	10/4/2007 8:00	5926.865252	5900.83254	0.995610798	0.000201337
10/3/2007 9:00	10/4/2007 9:00	5926.403111	5900.54489	0.995639715	0.000172104
10/3/2007 10:00	10/4/2007 10:00	5926.252044	5900.801402	0.995708356	0.000103132
10/3/2007 11:00	10/4/2007 11:00	5926.443617	5901.179964	0.99574	7.13023E-05
10/3/2007 12:00	10/4/2007 12:00	5926.618262	5900.976097	0.995676222	0.000135324
10/3/2007 13:00	10/4/2007 13:00	5926.125872	5899.689242	0.995541664	0.000270366
10/3/2007 14:00	10/4/2007 14:00	5925.726927	5899.426909	0.995564587	0.000247505
10/3/2007 15:00	10/4/2007 15:00	5925.742769	5899.262387	0.995534112	0.000278074
10/3/2007 16:00	10/4/2007 16:00	5925.778533	5898.962423	0.99547757	0.000334976
10/3/2007 17:00	10/4/2007 17:00	5925.659048	5899.034919	0.995509852	0.000302512
10/3/2007 18:00	10/4/2007 18:00	5925.605966	5898.704638	0.995463034	0.000349561
10/3/2007 19:00	10/4/2007 19:00	5925.676113	5899.16784	0.995529531	0.000282854
10/3/2007 20:00	10/4/2007 20:00	5925.718051	5899.020684	0.995497662	0.000314887
10/3/2007 21:00	10/4/2007 21:00	5925.673013	5899.241603	0.995542507	0.000269824
10/3/2007 22:00	10/4/2007 22:00	5925.697705	5899.362135	0.995558571	0.000253555
10/3/2007 23:00	10/4/2007 23:00	5925.844983	5899.849903	0.995616206	0.000195717
10/4/2007 0:00	10/5/2007 0:00	5926.068157	5900.610379	0.995706937	0.000104475
10/4/2007 1:00	10/5/2007 1:00	5926.132218	5900.352601	0.995652726	0.00015898
10/4/2007 2:00	10/5/2007 2:00	5926.124357	5900.934255	0.99575224	5.90678E-05
10/4/2007 3:00	10/5/2007 3:00	5926.168798	5901.492668	0.995838772	-2.80612E-05
10/4/2007 4:00	10/5/2007 4:00	5926.127259	5902.018032	0.995934349	-0.000124082
10/4/2007 5:00	10/5/2007 5:00	5926.186273	5902.195965	0.995954372	-0.000144268
10/4/2007 6:00	10/5/2007 6:00	5926.274343	5902.689897	0.996022954	-0.000213078
10/4/2007 7:00	10/5/2007 7:00	5926.330976	5902.136119	0.995919959	-0.000109716
10/4/2007 8:00	10/5/2007 8:00	5926.381273	5902.872893	0.996035629	-0.000226033
10/4/2007 9:00	10/5/2007 9:00	5926.502572	5902.9754	0.996032729	-0.000222932
10/4/2007 10:00	10/5/2007 10:00	5926.605388	5901.922852	0.99583786	-2.72839E-05
10/4/2007 11:00	10/5/2007 11:00	5926.463848	5901.650469	0.995815779	-5.01409E-06
10/4/2007 12:00	10/5/2007 12:00	5926.297042	5901.174213	0.995763532	4.75425E-05
10/4/2007 13:00	10/5/2007 13:00	5926.778913	5902.221608	0.995859361	-4.86236E-05
10/4/2007 14:00	10/5/2007 14:00	5927.180595	5902.366058	0.995815953	-5.32633E-06
10/4/2007 15:00	10/5/2007 15:00	5927.276572	5902.362945	0.995799572	1.13937E-05
10/4/2007 16:00	10/5/2007 16:00	5927.284627	5903.16169	0.995932865	-0.000122557
10/4/2007 17:00	10/5/2007 17:00	5927.256671	5903.239149	0.995950605	-0.000140393
10/4/2007 18:00	10/5/2007 18:00	5927.325239	5903.746684	0.996024677	-0.000214783
10/4/2007 19:00	10/5/2007 19:00	5927.350764	5903.503381	0.995979282	-0.000169273
10/4/2007 20:00	10/5/2007 20:00	5927.441032	5903.292537	0.995928619	-0.000118336
10/4/2007 21:00	10/5/2007 21:00	5927.566722	5902.553439	0.995782906	2.80707E-05

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/4/2007 22:00	10/5/2007 22:00	5927.658353	5903.588669	0.995942138	-0.000131834
10/4/2007 23:00	10/5/2007 23:00	5927.673989	5903.719006	0.995961417	-0.000151271
10/5/2007 0:00	10/6/2007 0:00	5927.657081	5903.166664	0.995871056	-6.05702E-05

Max	**5932.896**	**5905.675**	**0.996381**	**0.000485**
Min	**5882.275**	**5857.600**	**0.995329**	**-0.000571**
Range	**50.621**	**48.075**	**0.001052**	**0.001056**
Median	**5926.331**	**5901.055**	**0.995761**	**0.000050**
Average	**5921.878**	**5896.763**	**0.995762**	**0.000049**
StDev	**12.238**	**11.073**	**0.000283**	**0.000284**
Count	**97**	**97**	**97**	**97**

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/1/2008 0:00	10/2/2008 0:00	5925.880224	5902.800297	0.996107178	1.9537E-06
10/1/2008 1:00	10/2/2008 1:00	5926.036822	5902.866166	0.99609184	1.72207E-05
10/1/2008 2:00	10/2/2008 2:00	5926.905963	5903.658028	0.996079418	2.97354E-05
10/1/2008 3:00	10/2/2008 3:00	5926.99914	5903.834021	0.99609348	1.56457E-05
10/1/2008 4:00	10/2/2008 4:00	5927.206621	5904.283617	0.996134405	-2.54991E-05
10/1/2008 5:00	10/2/2008 5:00	5927.198119	5904.347599	0.996146548	-3.77695E-05
10/1/2008 6:00	10/2/2008 6:00	5927.252284	5904.324098	0.996133338	-2.46512E-05
10/1/2008 7:00	10/2/2008 7:00	5927.21108	5903.90961	0.996070331	3.86006E-05
10/1/2008 8:00	10/2/2008 8:00	5927.254081	5903.366695	0.995971559	0.000137827
10/1/2008 9:00	10/2/2008 9:00	5927.274412	5903.643537	0.996015014	9.43575E-05
10/1/2008 10:00	10/2/2008 10:00	5927.31011	5903.99133	0.996067679	4.14668E-05
10/1/2008 11:00	10/2/2008 11:00	5927.401561	5903.647683	0.99599427	0.000115109
10/1/2008 12:00	10/2/2008 12:00	5927.479436	5903.906975	0.996024979	8.4324E-05
10/1/2008 13:00	10/2/2008 13:00	5927.602796	5903.923868	0.996007368	0.000102276
10/1/2008 14:00	10/2/2008 14:00	5927.659746	5903.848897	0.995984917	0.000124584
10/1/2008 15:00	10/2/2008 15:00	5927.829828	5903.454324	0.995889804	0.000220129
10/1/2008 16:00	10/2/2008 16:00	5927.931216	5903.506626	0.995881484	0.000228375
10/1/2008 17:00	10/2/2008 17:00	5928.055683	5903.348146	0.995833862	0.000276229
10/1/2008 18:00	10/2/2008 18:00	5928.096402	5902.875953	0.99574742	0.000363116
10/1/2008 19:00	10/2/2008 19:00	5928.119731	5902.623353	0.995700803	0.000409863
10/1/2008 20:00	10/2/2008 20:00	5928.101686	5903.15847	0.995794149	0.000316131
10/1/2008 21:00	10/2/2008 21:00	5928.103687	5903.859551	0.995912025	0.000197682
10/1/2008 22:00	10/2/2008 22:00	5928.126676	5903.492338	0.995846179	0.000263776
10/1/2008 23:00	10/2/2008 23:00	5928.029512	5902.220048	0.995648122	0.000462996
10/2/2008 0:00	10/3/2008 0:00	5927.898319	5901.310349	0.995516492	0.000595074
10/2/2008 1:00	10/3/2008 1:00	5927.85872	5901.759423	0.995599047	0.000512254
10/2/2008 2:00	10/3/2008 2:00	5928.021948	5902.06336	0.995623062	0.000488279
10/2/2008 3:00	10/3/2008 3:00	5928.124454	5902.079408	0.995608368	0.000502859
10/2/2008 4:00	10/3/2008 4:00	5927.969578	5901.509563	0.995538447	0.000573326
10/2/2008 5:00	10/3/2008 5:00	5927.906823	5901.992274	0.995630669	0.0004809
10/2/2008 6:00	10/3/2008 6:00	5927.941269	5902.250427	0.995668627	0.000442954
10/2/2008 7:00	10/3/2008 7:00	5928.043416	5902.802634	0.995744619	0.0003666
10/2/2008 8:00	10/3/2008 8:00	5928.090051	5902.444697	0.995676302	0.000435135
10/2/2008 9:00	10/3/2008 9:00	5928.02769	5902.683276	0.995727014	0.000384174
10/2/2008 10:00	10/3/2008 10:00	5927.909201	5902.646467	0.99574065	0.000370417
10/2/2008 11:00	10/3/2008 11:00	5927.857296	5902.718347	0.995761521	0.000349476
10/2/2008 12:00	10/3/2008 12:00	5927.808792	5902.471039	0.995728204	0.000383204
10/2/2008 13:00	10/3/2008 13:00	5927.980535	5902.985377	0.995786049	0.00032502
10/2/2008 14:00	10/3/2008 14:00	5928.108412	5902.924352	0.995754313	0.00035694
10/2/2008 15:00	10/3/2008 15:00	5928.153949	5902.798122	0.995725447	0.000386017
10/2/2008 16:00	10/3/2008 16:00	5928.206666	5902.177186	0.995611896	0.000500159
10/2/2008 17:00	10/3/2008 17:00	5928.082422	5902.568482	0.995698702	0.000412866
10/2/2008 18:00	10/3/2008 18:00	5928.025585	5902.892069	0.995762816	0.000348434
10/2/2008 19:00	10/3/2008 19:00	5928.016165	5903.882245	0.995931608	0.00017907
10/2/2008 20:00	10/3/2008 20:00	5928.014969	5903.115462	0.995802343	0.000308786
10/2/2008 21:00	10/3/2008 21:00	5928.11471	5902.910401	0.995751076	0.000360367
10/2/2008 22:00	10/3/2008 22:00	5928.087842	5903.407294	0.995839454	0.000271633

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/2/2008 23:00	10/3/2008 23:00	5928.100879	5903.975762	0.995933088	0.000177521
10/3/2008 0:00	10/4/2008 0:00	5927.976976	5904.581116	0.996056272	5.40772E-05
10/3/2008 1:00	10/4/2008 1:00	5927.746572	5903.725399	0.995950657	0.000160155
10/3/2008 2:00	10/4/2008 2:00	5927.498751	5903.821764	0.996008503	0.000102017
10/3/2008 3:00	10/4/2008 3:00	5927.314658	5903.804535	0.996036593	7.38751E-05
10/3/2008 4:00	10/4/2008 4:00	5927.411736	5904.266559	0.996098025	1.19948E-05
10/3/2008 5:00	10/4/2008 5:00	5927.446659	5903.432745	0.995951397	0.000159131
10/3/2008 6:00	10/4/2008 6:00	5927.537662	5903.878497	0.996011218	9.89721E-05
10/3/2008 7:00	10/4/2008 7:00	5927.402856	5903.33399	0.995942205	0.000168472
10/3/2008 8:00	10/4/2008 8:00	5927.239688	5903.0044	0.995913904	0.000196781
10/3/2008 9:00	10/4/2008 9:00	5927.208318	5902.772401	0.995880055	0.000230799
10/3/2008 10:00	10/4/2008 10:00	5927.188672	5902.304891	0.995804547	0.000306709
10/3/2008 11:00	10/4/2008 11:00	5927.13267	5902.596111	0.995863115	0.000247906
10/3/2008 12:00	10/4/2008 12:00	5927.251001	5902.554031	0.995836006	0.000275006
10/3/2008 13:00	10/4/2008 13:00	5927.103636	5902.530752	0.995857021	0.000254082
10/3/2008 14:00	10/4/2008 14:00	5926.986	5902.71694	0.995908154	0.00020268
10/3/2008 15:00	10/4/2008 15:00	5926.820346	5902.822106	0.995953611	0.000156906
10/3/2008 16:00	10/4/2008 16:00	5926.691076	5903.222746	0.996042847	6.72141E-05
10/3/2008 17:00	10/4/2008 17:00	5926.801676	5903.301658	0.996037594	7.2508E-05
10/3/2008 18:00	10/4/2008 18:00	5926.824694	5903.645533	0.996091811	1.81395E-05
10/3/2008 19:00	10/4/2008 19:00	5926.775523	5902.209327	0.995857483	0.000253179
10/3/2008 20:00	10/4/2008 20:00	5926.631308	5902.338399	0.995903696	0.000206967
10/3/2008 21:00	10/4/2008 21:00	5925.99149	5902.498535	0.99603844	7.18557E-05
10/3/2008 22:00	10/4/2008 22:00	5926.003513	5902.81553	0.996089746	2.01783E-05
10/3/2008 23:00	10/4/2008 23:00	5925.911479	5902.939482	0.996125955	-1.6351E-05
10/4/2008 0:00	10/5/2008 0:00	5925.995044	5902.344807	0.996011388	9.85024E-05
10/4/2008 1:00	10/5/2008 1:00	5926.270687	5902.911415	0.996060634	4.90194E-05
10/4/2008 2:00	10/5/2008 2:00	5926.483692	5902.347673	0.995929565	0.000180483
10/4/2008 3:00	10/5/2008 3:00	5926.733329	5901.596976	0.995760993	0.000349844
10/4/2008 4:00	10/5/2008 4:00	5926.727996	5902.486341	0.995911825	0.000198215
10/4/2008 5:00	10/5/2008 5:00	5926.712187	5902.189106	0.995864142	0.000245917
10/4/2008 6:00	10/5/2008 6:00	5926.534052	5901.711278	0.995813422	0.000296835
10/4/2008 7:00	10/5/2008 7:00	5926.525468	5902.000649	0.995863472	0.000246342
10/4/2008 8:00	10/5/2008 8:00	5926.732624	5902.694017	0.995945796	0.000163806
10/4/2008 9:00	10/5/2008 9:00	5926.753494	5903.245386	0.996035203	7.39108E-05
10/4/2008 10:00	10/5/2008 10:00	5926.721166	5903.494913	0.996082654	2.61853E-05
10/4/2008 11:00	10/5/2008 11:00	5926.702825	5903.188488	0.996034075	7.50001E-05
10/4/2008 12:00	10/5/2008 12:00	5926.704531	5903.293701	0.996051399	5.74641E-05
10/4/2008 13:00	10/5/2008 13:00	5926.718058	5904.281553	0.996215702	-0.000107575
10/4/2008 14:00	10/5/2008 14:00	5926.778846	5904.09462	0.996173936	-6.56607E-05
10/4/2008 15:00	10/5/2008 15:00	5926.879164	5904.485135	0.996222921	-0.000114871
10/4/2008 16:00	10/5/2008 16:00	5926.971288	5904.803045	0.99626115	-0.000153163
10/4/2008 17:00	10/5/2008 17:00	5926.96125	5904.573324	0.996224168	-0.000115957
10/4/2008 18:00	10/5/2008 18:00	5927.029827	5904.332476	0.99617193	-6.36006E-05
10/4/2008 19:00	10/5/2008 19:00	5927.097869	5905.202454	0.996307511	-0.000199438
10/4/2008 20:00	10/5/2008 20:00	5927.338993	5905.4659	0.99631141	-0.000203368
10/4/2008 21:00	10/5/2008 21:00	5928.038197	5905.817503	0.996253026	-0.000144959

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/4/2008 22:00	10/5/2008 22:00	5928.075927	5905.761285	0.996237233	-0.000129077
10/4/2008 23:00	10/5/2008 23:00	5928.198524	5905.561973	0.996183053	-7.46531E-05
10/5/2008 0:00	10/6/2008 0:00	5928.158615	5905.890433	0.99624514	-0.000136996

Max	**5928.207**	**5905.890**	**0.996311**	**0.000595**
Min	**5925.880**	**5901.310**	**0.995516**	**-0.000203**
Range	**2.326**	**4.580**	**0.000795**	**0.000798**
Median	**5927.339**	**5903.158**	**0.995942**	**0.000168**
Average	**5927.362**	**5903.259**	**0.995936**	**0.000174**
StDev	**0.650**	**0.980**	**0.000188**	**0.000189**
Count	**97**	**97**	**97**	**97**

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/1/2007 0:00	10/2/2007 0:00	5839.36616	5832.252416	0.99878381	2.05102E-06
10/1/2007 1:00	10/2/2007 1:00	5841.721991	5834.580362	0.99877923	6.33858E-06
10/1/2007 2:00	10/2/2007 2:00	5844.00368	5837.231515	0.998842882	-5.74342E-05
10/1/2007 3:00	10/2/2007 3:00	5845.914152	5838.630089	0.998755587	2.98558E-05
10/1/2007 4:00	10/2/2007 4:00	5847.475555	5840.271171	0.99876961	1.58794E-05
10/1/2007 5:00	10/2/2007 5:00	5849.177234	5842.241888	0.998815488	-3.05306E-05
10/1/2007 6:00	10/2/2007 6:00	5850.893468	5844.308839	0.998875775	-9.08871E-05
10/1/2007 7:00	10/2/2007 7:00	5852.69502	5846.169873	0.998886536	-0.000101407
10/1/2007 8:00	10/2/2007 8:00	5854.356283	5848.199914	0.998950061	-0.000164776
10/1/2007 9:00	10/2/2007 9:00	5856.141733	5850.9912	0.999122338	-0.000336977
10/1/2007 10:00	10/2/2007 10:00	5857.865029	5852.803528	0.999137748	-0.000352443
10/1/2007 11:00	10/2/2007 11:00	5859.739009	5854.19393	0.999056034	-0.000270145
10/1/2007 12:00	10/2/2007 12:00	5861.593791	5856.177993	0.999078411	-0.000292514
10/1/2007 13:00	10/2/2007 13:00	5863.682566	5857.927715	0.999020844	-0.000234981
10/1/2007 14:00	10/2/2007 14:00	5865.398575	5860.513543	0.999169425	-0.000383654
10/1/2007 15:00	10/2/2007 15:00	5866.968454	5861.921548	0.999142335	-0.000356273
10/1/2007 16:00	10/2/2007 16:00	5868.419216	5863.37517	0.999143114	-0.000356973
10/1/2007 17:00	10/2/2007 17:00	5870.033866	5865.216979	0.999181902	-0.000395926
10/1/2007 18:00	10/2/2007 18:00	5871.666944	5866.392106	0.999104073	-0.000318122
10/1/2007 19:00	10/2/2007 19:00	5873.120873	5868.068432	0.999142247	-0.000356232
10/1/2007 20:00	10/2/2007 20:00	5874.695259	5869.315026	0.999086508	-0.000300634
10/1/2007 21:00	10/2/2007 21:00	5876.153809	5870.416957	0.999026217	-0.000240131
10/1/2007 22:00	10/2/2007 22:00	5877.29375	5871.38738	0.998997643	-0.000211456
10/1/2007 23:00	10/2/2007 23:00	5878.06597	5872.382492	0.999035643	-0.000249536
10/2/2007 0:00	10/3/2007 0:00	5878.930375	5872.928153	0.99898159	-0.000195418
10/2/2007 1:00	10/3/2007 1:00	5879.526232	5873.592823	0.998993313	-0.000207235
10/2/2007 2:00	10/3/2007 2:00	5880.080488	5873.736277	0.99892356	-0.000137406
10/2/2007 3:00	10/3/2007 3:00	5880.755379	5874.67435	0.998968291	-0.000182323
10/2/2007 4:00	10/3/2007 4:00	5881.680839	5875.613344	0.998970848	-0.000184789
10/2/2007 5:00	10/3/2007 5:00	5882.361225	5875.622068	0.998856687	-7.06164E-05
10/2/2007 6:00	10/3/2007 6:00	5883.033977	5876.144001	0.998831259	-4.5083E-05
10/2/2007 7:00	10/3/2007 7:00	5883.720166	5876.897645	0.998842811	-5.66971E-05
10/2/2007 8:00	10/3/2007 8:00	5884.543801	5877.6447	0.998829867	-4.38313E-05
10/2/2007 9:00	10/3/2007 9:00	5885.366745	5877.768273	0.998711087	7.49851E-05
10/2/2007 10:00	10/3/2007 10:00	5885.811976	5878.032299	0.998680181	0.000105717
10/2/2007 11:00	10/3/2007 11:00	5885.825843	5878.910475	0.998827228	-4.13201E-05
10/2/2007 12:00	10/3/2007 12:00	5886.000924	5878.814428	0.998781161	4.76244E-06
10/2/2007 13:00	10/3/2007 13:00	5886.233824	5879.153865	0.998799345	-1.34072E-05
10/2/2007 14:00	10/3/2007 14:00	5886.586654	5878.837536	0.998685498	0.000100344
10/2/2007 15:00	10/3/2007 15:00	5886.778751	5879.095315	0.998696804	8.91279E-05
10/2/2007 16:00	10/3/2007 16:00	5886.584584	5879.027161	0.998718242	6.77348E-05
10/2/2007 17:00	10/3/2007 17:00	5886.187716	5878.24305	0.998652485	0.000133703
10/2/2007 18:00	10/3/2007 18:00	5885.803828	5878.383116	0.998741624	4.46471E-05
10/2/2007 19:00	10/3/2007 19:00	5885.356992	5878.150757	0.998778063	8.25425E-06
10/2/2007 20:00	10/3/2007 20:00	5884.763035	5877.874806	0.998831949	-4.57247E-05
10/2/2007 21:00	10/3/2007 21:00	5884.330697	5877.300056	0.998807455	-2.14088E-05
10/2/2007 22:00	10/3/2007 22:00	5883.910525	5877.02951	0.998832797	-4.67822E-05

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/2/2007 23:00	10/3/2007 23:00	5883.676556	5876.730826	0.998821743	-3.57242E-05
10/3/2007 0:00	10/4/2007 0:00	5883.250395	5876.190074	0.998802053	-1.61383E-05
10/3/2007 1:00	10/4/2007 1:00	5882.86495	5875.721476	0.998787959	-1.9078E-06
10/3/2007 2:00	10/4/2007 2:00	5882.604744	5875.692121	0.998827117	-4.11431E-05
10/3/2007 3:00	10/4/2007 3:00	5882.125591	5874.950092	0.998782334	3.69608E-06
10/3/2007 4:00	10/4/2007 4:00	5881.55703	5874.00982	0.998719057	6.7095E-05
10/3/2007 5:00	10/4/2007 5:00	5881.084992	5873.701526	0.998746727	3.93186E-05
10/3/2007 6:00	10/4/2007 6:00	5880.636868	5873.343883	0.998761871	2.40084E-05
10/3/2007 7:00	10/4/2007 7:00	5880.04151	5872.62122	0.998740049	4.58126E-05
10/3/2007 8:00	10/4/2007 8:00	5879.54701	5872.081027	0.998732248	5.37005E-05
10/3/2007 9:00	10/4/2007 9:00	5879.067406	5871.861222	0.998776282	9.55705E-06
10/3/2007 10:00	10/4/2007 10:00	5879.090354	5871.831715	0.998767573	1.84859E-05
10/3/2007 11:00	10/4/2007 11:00	5879.29618	5871.363594	0.998652869	0.00013323
10/3/2007 12:00	10/4/2007 12:00	5879.367022	5871.77422	0.998710726	7.53386E-05
10/3/2007 13:00	10/4/2007 13:00	5878.83984	5871.353406	0.998728912	5.73369E-05
10/3/2007 14:00	10/4/2007 14:00	5878.171548	5870.414045	0.998682497	0.00010366
10/3/2007 15:00	10/4/2007 15:00	5878.090161	5870.471679	0.998706024	7.99944E-05
10/3/2007 16:00	10/4/2007 16:00	5878.258969	5870.427996	0.998669902	0.000116157
10/3/2007 17:00	10/4/2007 17:00	5878.298005	5870.565355	0.998686437	9.93976E-05
10/3/2007 18:00	10/4/2007 18:00	5878.319471	5870.721557	0.998709311	7.644E-05
10/3/2007 19:00	10/4/2007 19:00	5878.240053	5870.664496	0.998713124	7.2649E-05
10/3/2007 20:00	10/4/2007 20:00	5878.382974	5870.736525	0.998701093	8.4694E-05
10/3/2007 21:00	10/4/2007 21:00	5878.350164	5871.283858	0.998799865	-1.41173E-05
10/3/2007 22:00	10/4/2007 22:00	5878.270034	5871.274458	0.99881187	-2.61475E-05
10/3/2007 23:00	10/4/2007 23:00	5878.1531	5871.349768	0.998844557	-5.88659E-05
10/4/2007 0:00	10/5/2007 0:00	5878.193792	5871.540946	0.998870247	-8.45021E-05
10/4/2007 1:00	10/5/2007 1:00	5878.29887	5871.2021	0.998794864	-8.91823E-06
10/4/2007 2:00	10/5/2007 2:00	5878.319037	5871.100048	0.99877416	1.18944E-05
10/4/2007 3:00	10/5/2007 3:00	5878.23388	5870.932335	0.998760099	2.59743E-05
10/4/2007 4:00	10/5/2007 4:00	5878.042382	5871.21169	0.998840074	-5.41842E-05
10/4/2007 5:00	10/5/2007 5:00	5878.17174	5870.93998	0.998771856	1.41005E-05
10/4/2007 6:00	10/5/2007 6:00	5878.198247	5871.3461	0.998836506	-5.05612E-05
10/4/2007 7:00	10/5/2007 7:00	5878.104817	5871.805786	0.998930756	-0.000144736
10/4/2007 8:00	10/5/2007 8:00	5878.018203	5871.442498	0.998883656	-9.76054E-05
10/4/2007 9:00	10/5/2007 9:00	5877.983157	5871.129024	0.998836436	-5.018E-05
10/4/2007 10:00	10/5/2007 10:00	5877.912087	5871.24093	0.998867478	-8.13293E-05
10/4/2007 11:00	10/5/2007 11:00	5878.006799	5871.897919	0.99896318	-0.000177097
10/4/2007 12:00	10/5/2007 12:00	5877.908478	5871.682413	0.99894325	-0.000157126
10/4/2007 13:00	10/5/2007 13:00	5878.375282	5872.068058	0.998929303	-0.000143391
10/4/2007 14:00	10/5/2007 14:00	5878.91974	5873.066839	0.999006841	-0.000220836
10/4/2007 15:00	10/5/2007 15:00	5879.095338	5873.378879	0.999030149	-0.000244091
10/4/2007 16:00	10/5/2007 16:00	5879.056389	5873.189374	0.999004433	-0.000218457
10/4/2007 17:00	10/5/2007 17:00	5879.153077	5873.204566	0.998990639	-0.0002046
10/4/2007 18:00	10/5/2007 18:00	5879.115397	5873.024528	0.998966474	-0.000180359
10/4/2007 19:00	10/5/2007 19:00	5879.362826	5872.563005	0.998845909	-5.97021E-05
10/4/2007 20:00	10/5/2007 20:00	5879.314783	5872.021291	0.998761966	2.4374E-05
10/4/2007 21:00	10/5/2007 21:00	5879.211574	5871.982742	0.998773047	1.3384E-05

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/4/2007 22:00	10/5/2007 22:00	5879.448579	5872.16989	0.998764564	2.1825E-05
10/4/2007 23:00	10/5/2007 23:00	5879.733686	5871.903886	0.998670858	0.000115622
10/5/2007 0:00	10/6/2007 0:00	5879.848015	5872.393273	0.998734597	5.17211E-05

Max	**5886.779**	**5879.154**	**0.999182**	**0.000134**
Min	**5839.366**	**5832.252**	**0.998652**	**-0.000396**
Range	**47.413**	**46.901**	**0.000529**	**0.000530**
Median	**5878.840**	**5871.832**	**0.998827**	**-0.000041**
Average	**5875.693**	**5868.949**	**0.998854**	**-0.000068**
StDev	**10.968**	**10.740**	**0.000138**	**0.000138**
Count	**97**	**97**	**97**	**97**

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/1/2008 0:00	10/2/2008 0:00	5867.457151	5854.088053	0.997722672	1.19097E-06
10/1/2008 1:00	10/2/2008 1:00	5867.539209	5853.822615	0.997663414	6.05213E-05
10/1/2008 2:00	10/2/2008 2:00	5868.38877	5854.1559	0.997575588	0.000148377
10/1/2008 3:00	10/2/2008 3:00	5868.284183	5854.714399	0.997688517	3.51468E-05
10/1/2008 4:00	10/2/2008 4:00	5868.108137	5854.14622	0.997621705	0.000102203
10/1/2008 5:00	10/2/2008 5:00	5868.184293	5853.771953	0.997544968	0.000179125
10/1/2008 6:00	10/2/2008 6:00	5868.258853	5853.555465	0.9974954	0.000228824
10/1/2008 7:00	10/2/2008 7:00	5868.344571	5853.508553	0.997472884	0.000251451
10/1/2008 8:00	10/2/2008 8:00	5868.230794	5852.982192	0.997402583	0.000322009
10/1/2008 9:00	10/2/2008 9:00	5868.258457	5852.511824	0.997317765	0.000407121
10/1/2008 10:00	10/2/2008 10:00	5868.311323	5852.427065	0.997294298	0.000430622
10/1/2008 11:00	10/2/2008 11:00	5868.350736	5852.030843	0.997220013	0.000505078
10/1/2008 12:00	10/2/2008 12:00	5868.431911	5852.306302	0.997253206	0.000471825
10/1/2008 13:00	10/2/2008 13:00	5868.353691	5852.170041	0.99724327	0.000481784
10/1/2008 14:00	10/2/2008 14:00	5868.438214	5852.179405	0.997230495	0.000494593
10/1/2008 15:00	10/2/2008 15:00	5868.436746	5852.278756	0.997247684	0.000477358
10/1/2008 16:00	10/2/2008 16:00	5868.349548	5851.783459	0.997178223	0.000547172
10/1/2008 17:00	10/2/2008 17:00	5868.387618	5851.287399	0.997087333	0.000638488
10/1/2008 18:00	10/2/2008 18:00	5868.333572	5852.015775	0.997220754	0.000504728
10/1/2008 19:00	10/2/2008 19:00	5868.382904	5851.871364	0.997187737	0.000537829
10/1/2008 20:00	10/2/2008 20:00	5868.45137	5852.218189	0.997235153	0.000490206
10/1/2008 21:00	10/2/2008 21:00	5868.510631	5853.011916	0.99736037	0.000364631
10/1/2008 22:00	10/2/2008 22:00	5868.529731	5852.118874	0.997204962	0.000520544
10/1/2008 23:00	10/2/2008 23:00	5868.334812	5851.66439	0.997160723	0.000565018
10/2/2008 0:00	10/3/2008 0:00	5868.323103	5850.753187	0.997007478	0.000718851
10/2/2008 1:00	10/3/2008 1:00	5868.399701	5850.773008	0.996997847	0.000728523
10/2/2008 2:00	10/3/2008 2:00	5868.409593	5851.420139	0.997106473	0.000619535
10/2/2008 3:00	10/3/2008 3:00	5868.562965	5851.1119	0.997028028	0.000698401
10/2/2008 4:00	10/3/2008 4:00	5868.815082	5851.488388	0.997049317	0.000677003
10/2/2008 5:00	10/3/2008 5:00	5868.727271	5851.306011	0.997033148	0.00069322
10/2/2008 6:00	10/3/2008 6:00	5868.648649	5851.738512	0.997120088	0.000605854
10/2/2008 7:00	10/3/2008 7:00	5868.699137	5852.090617	0.99717147	0.000554258
10/2/2008 8:00	10/3/2008 8:00	5868.826531	5852.322508	0.997189395	0.00053633
10/2/2008 9:00	10/3/2008 9:00	5868.836539	5853.005427	0.997303932	0.000421295
10/2/2008 10:00	10/3/2008 10:00	5868.760659	5853.314356	0.997369548	0.000355561
10/2/2008 11:00	10/3/2008 11:00	5868.679982	5853.931219	0.997488496	0.000236397
10/2/2008 12:00	10/3/2008 12:00	5868.739856	5853.806427	0.997457055	0.000267925
10/2/2008 13:00	10/3/2008 13:00	5868.851131	5853.675331	0.997415824	0.000309293
10/2/2008 14:00	10/3/2008 14:00	5869.008303	5854.118243	0.997464461	0.000260398
10/2/2008 15:00	10/3/2008 15:00	5869.015811	5854.048786	0.997451364	0.000273546
10/2/2008 16:00	10/3/2008 16:00	5869.156327	5854.40806	0.99748857	0.000236108
10/2/2008 17:00	10/3/2008 17:00	5869.228462	5854.732988	0.997531796	0.000192889
10/2/2008 18:00	10/3/2008 18:00	5869.143662	5855.14942	0.99761726	0.000107303
10/2/2008 19:00	10/3/2008 19:00	5869.036999	5855.64042	0.997719043	5.26935E-06
10/2/2008 20:00	10/3/2008 20:00	5869.08663	5855.453751	0.997678866	4.56058E-05
10/2/2008 21:00	10/3/2008 21:00	5869.088343	5855.095117	0.997617556	0.000107152
10/2/2008 22:00	10/3/2008 22:00	5869.096166	5855.545005	0.997692847	3.16456E-05

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/2/2008 23:00	10/3/2008 23:00	5869.014954	5855.477947	0.997695155	2.92604E-05
10/3/2008 0:00	10/4/2008 0:00	5868.765362	5855.522426	0.997745155	-2.0864E-05
10/3/2008 1:00	10/4/2008 1:00	5868.498609	5854.918869	0.997687645	3.67626E-05
10/3/2008 2:00	10/4/2008 2:00	5868.260187	5854.539422	0.997663436	6.09459E-05
10/3/2008 3:00	10/4/2008 3:00	5868.163998	5854.799989	0.997724148	4.66333E-08
10/3/2008 4:00	10/4/2008 4:00	5868.09467	5854.929001	0.997757926	-3.3802E-05
10/3/2008 5:00	10/4/2008 5:00	5868.220823	5854.700048	0.997697469	2.68007E-05
10/3/2008 6:00	10/4/2008 6:00	5868.23418	5854.665754	0.997689456	3.49347E-05
10/3/2008 7:00	10/4/2008 7:00	5868.222339	5854.982723	0.997745512	-2.12216E-05
10/3/2008 8:00	10/4/2008 8:00	5868.069689	5855.216528	0.997811236	-8.71633E-05
10/3/2008 9:00	10/4/2008 9:00	5867.842697	5855.279253	0.997860658	-0.000136554
10/3/2008 10:00	10/4/2008 10:00	5867.921966	5855.298771	0.997850451	-0.000126379
10/3/2008 11:00	10/4/2008 11:00	5868.041	5854.902402	0.997762641	-3.8405E-05
10/3/2008 12:00	10/4/2008 12:00	5867.964161	5854.898383	0.997774931	-5.08126E-05
10/3/2008 13:00	10/4/2008 13:00	5867.947456	5855.298674	0.99784599	-0.000122019
10/3/2008 14:00	10/4/2008 14:00	5867.535755	5854.694958	0.997813238	-8.90751E-05
10/3/2008 15:00	10/4/2008 15:00	5867.527534	5854.591314	0.9977969	-7.27747E-05
10/3/2008 16:00	10/4/2008 16:00	5867.518028	5854.024701	0.997701985	2.23884E-05
10/3/2008 17:00	10/4/2008 17:00	5867.522559	5854.386744	0.997762825	-3.86821E-05
10/3/2008 18:00	10/4/2008 18:00	5867.609574	5854.007928	0.997683342	4.08562E-05
10/3/2008 19:00	10/4/2008 19:00	5867.575393	5853.869842	0.997665767	5.86204E-05
10/3/2008 20:00	10/4/2008 20:00	5867.376868	5853.87682	0.997700734	2.35921E-05
10/3/2008 21:00	10/4/2008 21:00	5866.995858	5853.787909	0.997750657	-2.61584E-05
10/3/2008 22:00	10/4/2008 22:00	5866.923443	5853.694262	0.997746987	-2.25036E-05
10/3/2008 23:00	10/4/2008 23:00	5866.948695	5853.588264	0.99772464	-9.17167E-08
10/4/2008 0:00	10/5/2008 0:00	5867.168099	5853.278267	0.99763455	9.0268E-05
10/4/2008 1:00	10/5/2008 1:00	5867.491956	5854.027108	0.997707065	1.75336E-05
10/4/2008 2:00	10/5/2008 2:00	5867.761133	5854.114483	0.997676252	4.84843E-05
10/4/2008 3:00	10/5/2008 3:00	5867.907555	5854.275517	0.997678707	4.59299E-05
10/4/2008 4:00	10/5/2008 4:00	5868.026132	5854.212394	0.997647782	7.69217E-05
10/4/2008 5:00	10/5/2008 5:00	5867.932055	5854.17436	0.997657239	6.73856E-05
10/4/2008 6:00	10/5/2008 6:00	5867.945955	5853.45726	0.997532691	0.000192272
10/4/2008 7:00	10/5/2008 7:00	5867.795826	5852.68874	0.997427289	0.000298015
10/4/2008 8:00	10/5/2008 8:00	5867.737633	5852.851848	0.997465083	0.000260219
10/4/2008 9:00	10/5/2008 9:00	5867.814231	5852.71816	0.99742917	0.000296124
10/4/2008 10:00	10/5/2008 10:00	5867.768859	5852.101376	0.9973318	0.000393815
10/4/2008 11:00	10/5/2008 11:00	5867.733973	5852.183805	0.997351736	0.000373777
10/4/2008 12:00	10/5/2008 12:00	5867.76346	5852.307383	0.997367927	0.00035768
10/4/2008 13:00	10/5/2008 13:00	5867.831101	5852.564805	0.997400254	0.000325211
10/4/2008 14:00	10/5/2008 14:00	5868.060296	5852.524674	0.997354351	0.000371143
10/4/2008 15:00	10/5/2008 15:00	5868.088427	5852.202078	0.997294598	0.000431083
10/4/2008 16:00	10/5/2008 16:00	5867.960196	5852.146218	0.997306892	0.000418771
10/4/2008 17:00	10/5/2008 17:00	5867.871265	5852.155677	0.997323562	0.000401992
10/4/2008 18:00	10/5/2008 18:00	5868.115577	5851.8868	0.997236204	0.000489612
10/4/2008 19:00	10/5/2008 19:00	5868.347954	5851.70122	0.997164924	0.000560962
10/4/2008 20:00	10/5/2008 20:00	5868.616503	5851.940645	0.997160076	0.000565811
10/4/2008 21:00	10/5/2008 21:00	5868.983541	5851.958581	0.997100382	0.000625322

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/4/2008 22:00	10/5/2008 22:00	5869.026813	5852.117058	0.997120013	0.000605602
10/4/2008 23:00	10/5/2008 23:00	5869.089556	5852.738412	0.997215203	0.000510069
10/5/2008 0:00	10/6/2008 0:00	5869.050143	5852.763758	0.997226241	0.000499017

Max	**5869.228**	**5855.640**	**0.997861**	**0.000729**
Min	**5866.923**	**5850.753**	**0.996998**	**-0.000137**
Range	**2.305**	**4.887**	**0.000863**	**0.000865**
Median	**5868.284**	**5853.555**	**0.997465**	**0.000260**
Average	**5868.252**	**5853.367**	**0.997465**	**0.000260**
StDev	**0.539**	**1.308**	**0.000246**	**0.000246**
Count	**97**	**97**	**97**	**97**

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/6/2007 0:00	10/7/2007 0:00	6010.410744	6042.196722	1.005289341	8.49929E-07
10/6/2007 1:00	10/7/2007 1:00	6010.44158	6042.361783	1.005311585	-2.1337E-05
10/6/2007 2:00	10/7/2007 2:00	6010.366117	6042.177242	1.00529345	-3.35097E-06
10/6/2007 3:00	10/7/2007 3:00	6010.31663	6042.043726	1.005279615	1.0513E-05
10/6/2007 4:00	10/7/2007 4:00	6010.282783	6041.888896	1.00525959	3.05076E-05
10/6/2007 5:00	10/7/2007 5:00	6010.15848	6041.637719	1.00523853	5.13999E-05
10/6/2007 6:00	10/7/2007 6:00	6009.952302	6042.056378	1.005342602	-5.21986E-05
10/6/2007 7:00	10/7/2007 7:00	6009.581342	6042.009592	1.005396807	-0.000106177
10/6/2007 8:00	10/7/2007 8:00	6009.447128	6042.028159	1.005422253	-0.000131581
10/6/2007 9:00	10/7/2007 9:00	6009.299842	6041.676457	1.005388422	-9.78829E-05
10/6/2007 10:00	10/7/2007 10:00	6009.308233	6041.435233	1.005346783	-5.65623E-05
10/6/2007 11:00	10/7/2007 11:00	6009.329418	6040.968084	1.005265542	2.42888E-05
10/6/2007 12:00	10/7/2007 12:00	6009.312182	6040.552329	1.005199253	9.02494E-05
10/6/2007 13:00	10/7/2007 13:00	6009.275649	6040.571825	1.005208651	8.09417E-05
10/6/2007 14:00	10/7/2007 14:00	6009.248575	6040.344759	1.005175386	0.00011403
10/6/2007 15:00	10/7/2007 15:00	6009.179077	6040.410661	1.005197911	9.15527E-05
10/6/2007 16:00	10/7/2007 16:00	6009.168226	6040.162279	1.00515849	0.000130872
10/6/2007 17:00	10/7/2007 17:00	6009.188415	6040.014185	1.005130472	0.000158754
10/6/2007 18:00	10/7/2007 18:00	6009.284184	6039.786471	1.005076643	0.000212403
10/6/2007 19:00	10/7/2007 19:00	6009.333157	6039.534347	1.005026478	0.000262309
10/6/2007 20:00	10/7/2007 20:00	6009.36592	6039.803326	1.00506579	0.000223216
10/6/2007 21:00	10/7/2007 21:00	6009.53951	6039.891786	1.005051568	0.000237459
10/6/2007 22:00	10/7/2007 22:00	6009.568567	6039.834978	1.005037261	0.000251704
10/6/2007 23:00	10/7/2007 23:00	6009.702967	6039.449231	1.004950593	0.000337962
10/7/2007 0:00	10/8/2007 0:00	6009.737285	6039.103135	1.004887307	0.000401003
10/7/2007 1:00	10/8/2007 1:00	6009.735425	6038.952885	1.004862654	0.000425584
10/7/2007 2:00	10/8/2007 2:00	6009.829972	6039.067205	1.004865892	0.000422385
10/7/2007 3:00	10/8/2007 3:00	6009.728017	6038.987484	1.004869651	0.000418619
10/7/2007 4:00	10/8/2007 4:00	6009.744	6038.880677	1.004849125	0.000438974
10/7/2007 5:00	10/8/2007 5:00	6009.97331	6039.103258	1.004847861	0.000440273
10/7/2007 6:00	10/8/2007 6:00	6010.248326	6039.145907	1.004808975	0.000478987
10/7/2007 7:00	10/8/2007 7:00	6010.537008	6039.350251	1.004794668	0.000493189
10/7/2007 8:00	10/8/2007 8:00	6010.552973	6039.06935	1.004745374	0.000542383
10/7/2007 9:00	10/8/2007 9:00	6010.552109	6038.565477	1.00466163	0.000625727
10/7/2007 10:00	10/8/2007 10:00	6010.473747	6039.022644	1.004750871	0.000536933
10/7/2007 11:00	10/8/2007 11:00	6010.356462	6039.193811	1.004798901	0.000489052
10/7/2007 12:00	10/8/2007 12:00	6010.436772	6038.969867	1.004748222	0.000539522
10/7/2007 13:00	10/8/2007 13:00	6010.445787	6038.983203	1.004748875	0.000538813
10/7/2007 14:00	10/8/2007 14:00	6010.417467	6039.386035	1.004820606	0.000467362
10/7/2007 15:00	10/8/2007 15:00	6010.413916	6039.453921	1.004832574	0.000455526
10/7/2007 16:00	10/8/2007 16:00	6010.300297	6039.659712	1.00488573	0.000402525
10/7/2007 17:00	10/8/2007 17:00	6010.202739	6039.478969	1.004872007	0.000416225
10/7/2007 18:00	10/8/2007 18:00	6010.135619	6039.616435	1.004906017	0.000382283
10/7/2007 19:00	10/8/2007 19:00	6010.088582	6039.376981	1.004874094	0.000414117
10/7/2007 20:00	10/8/2007 20:00	6009.944301	6039.316561	1.004888238	0.000400109
10/7/2007 21:00	10/8/2007 21:00	6009.744477	6039.032533	1.004874373	0.000413896
10/7/2007 22:00	10/8/2007 22:00	6009.544247	6038.532609	1.00482471	0.000463386

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/7/2007 23:00	10/8/2007 23:00	6009.430921	6038.606234	1.004855891	0.000432321
10/8/2007 0:00	10/9/2007 0:00	6009.342743	6038.569813	1.004864493	0.000423676
10/8/2007 1:00	10/9/2007 1:00	6009.294041	6038.740674	1.0049011	0.000387262
10/8/2007 2:00	10/9/2007 2:00	6009.14323	6038.703468	1.004920222	0.000368319
10/8/2007 3:00	10/9/2007 3:00	6009.170433	6038.855256	1.004940865	0.000347703
10/8/2007 4:00	10/9/2007 4:00	6009.23912	6039.548613	1.005044858	0.000244294
10/8/2007 5:00	10/9/2007 5:00	6009.403952	6039.796451	1.005058545	0.000230685
10/8/2007 6:00	10/9/2007 6:00	6009.413375	6039.468313	1.005002432	0.000286598
10/8/2007 7:00	10/9/2007 7:00	6009.303181	6039.313499	1.004995111	0.000293897
10/8/2007 8:00	10/9/2007 8:00	6009.377709	6039.394314	1.004995946	0.000292917
10/8/2007 9:00	10/9/2007 9:00	6009.377682	6039.770695	1.005058575	0.000230578
10/8/2007 10:00	10/9/2007 10:00	6009.389228	6039.479391	1.005008083	0.000280744
10/8/2007 11:00	10/9/2007 11:00	6009.493642	6039.940115	1.005067298	0.000221822
10/8/2007 12:00	10/9/2007 12:00	6009.392751	6039.996118	1.005093454	0.000195755
10/8/2007 13:00	10/9/2007 13:00	6009.259651	6039.720277	1.005069831	0.000219282
10/8/2007 14:00	10/9/2007 14:00	6009.118613	6039.72363	1.00509406	0.000195251
10/8/2007 15:00	10/9/2007 15:00	6009.037474	6039.189167	1.00501858	0.000270261
10/8/2007 16:00	10/9/2007 16:00	6009.037878	6038.728929	1.004941961	0.000346563
10/8/2007 17:00	10/9/2007 17:00	6008.947331	6038.467299	1.004913505	0.000374831
10/8/2007 18:00	10/9/2007 18:00	6008.920047	6038.626019	1.00494452	0.000343995
10/8/2007 19:00	10/9/2007 19:00	6008.970447	6038.894847	1.004980743	0.000307854
10/8/2007 20:00	10/9/2007 20:00	6009.201186	6039.548353	1.005050839	0.000238023
10/8/2007 21:00	10/9/2007 21:00	6009.408206	6039.814776	1.005060552	0.000228358
10/8/2007 22:00	10/9/2007 22:00	6009.632134	6040.264355	1.005097938	0.00019118
10/8/2007 23:00	10/9/2007 23:00	6009.703329	6040.450184	1.00511697	0.000172258
10/9/2007 0:00	10/10/2007 0:00	6009.76888	6040.829824	1.005169257	0.00012031
10/9/2007 1:00	10/10/2007 1:00	6009.735424	6040.720201	1.005156671	0.000132892
10/9/2007 2:00	10/10/2007 2:00	6009.681974	6040.391092	1.005110754	0.000178489
10/9/2007 3:00	10/10/2007 3:00	6009.774227	6040.483714	1.005110805	0.000178506
10/9/2007 4:00	10/10/2007 4:00	6009.727784	6040.280637	1.0050847	0.000204402
10/9/2007 5:00	10/10/2007 5:00	6009.457107	6040.071417	1.00509509	0.000193998
10/9/2007 6:00	10/10/2007 6:00	6009.321978	6039.992193	1.005104466	0.000184626
10/9/2007 7:00	10/10/2007 7:00	6009.170106	6039.845665	1.005105522	0.000183613
10/9/2007 8:00	10/10/2007 8:00	6009.027457	6039.719706	1.005108489	0.000180728
10/9/2007 9:00	10/10/2007 9:00	6009.056428	6039.629376	1.005088573	0.000200509
10/9/2007 10:00	10/10/2007 10:00	6009.219394	6039.884888	1.005103962	0.000185321
10/9/2007 11:00	10/10/2007 11:00	6009.367565	6039.420585	1.005001947	0.000286878
10/9/2007 12:00	10/10/2007 12:00	6009.464671	6039.327396	1.004970191	0.000318477
10/9/2007 13:00	10/10/2007 13:00	6009.541622	6039.846214	1.005043687	0.000245358
10/9/2007 14:00	10/10/2007 14:00	6009.632204	6039.79338	1.005019713	0.000269185
10/9/2007 15:00	10/10/2007 15:00	6009.672006	6040.198208	1.005080526	0.000208769
10/9/2007 16:00	10/10/2007 16:00	6009.757606	6040.890898	1.005181461	0.000108323
10/9/2007 17:00	10/10/2007 17:00	6009.960086	6041.431144	1.005237521	5.25824E-05
10/9/2007 18:00	10/10/2007 18:00	6010.215484	6041.329514	1.005177931	0.000111904
10/9/2007 19:00	10/10/2007 19:00	6010.286309	6041.555148	1.005203649	8.63381E-05
10/9/2007 20:00	10/10/2007 20:00	6010.186508	6041.007533	1.005129256	0.000160388
10/9/2007 21:00	10/10/2007 21:00	6010.025183	6041.107629	1.005172854	0.00011697

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/9/2007 22:00	10/10/2007 22:00	6009.894396	6041.112799	1.005195552	9.43501E-05
10/9/2007 23:00	10/10/2007 23:00	6009.696279	6040.886053	1.005190959	9.89195E-05
10/10/2007 0:00	10/11/2007 0:00	6009.440513	6040.744498	1.005210132	7.97909E-05

Max	**6010.553**	**6042.362**	**1.005422**	**0.000626**
Min	**6008.920**	**6038.467**	**1.004662**	**-0.000132**
Range	**1.633**	**3.894**	**0.000761**	**0.000757**
Median	**6009.569**	**6039.786**	**1.005059**	**0.000231**
Average	**6009.663**	**6039.971**	**1.005044**	**0.000245**
StDev	**0.454**	**1.007**	**0.000167**	**0.000166**
Count	**97**	**97**	**97**	**97**

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/15/2008 0:00	10/16/2008 0:00	6004.039268	6038.629195	1.005763606	2.48213E-06
10/15/2008 1:00	10/16/2008 1:00	6004.238054	6038.407332	1.005693317	7.23342E-05
10/15/2008 2:00	10/16/2008 2:00	6004.298475	6038.510757	1.005700373	6.5269E-05
10/15/2008 3:00	10/16/2008 3:00	6004.347905	6038.332501	1.005662536	0.000103025
10/15/2008 4:00	10/16/2008 4:00	6004.494343	6038.794091	1.005714718	5.09688E-05
10/15/2008 5:00	10/16/2008 5:00	6004.486885	6039.374453	1.005812545	-4.63744E-05
10/15/2008 6:00	10/16/2008 6:00	6004.687578	6039.252688	1.005758678	7.20993E-06
10/15/2008 7:00	10/16/2008 7:00	6004.692936	6039.015514	1.005718269	4.73761E-05
10/15/2008 8:00	10/16/2008 8:00	6004.626871	6038.944954	1.005717575	4.80579E-05
10/15/2008 9:00	10/16/2008 9:00	6004.741988	6038.890585	1.005689216	7.62339E-05
10/15/2008 10:00	10/16/2008 10:00	6004.838171	6038.899608	1.005674663	9.07587E-05
10/15/2008 11:00	10/16/2008 11:00	6004.850947	6038.550345	1.005614348	0.000150731
10/15/2008 12:00	10/16/2008 12:00	6004.841638	6038.820302	1.005660894	0.00010447
10/15/2008 13:00	10/16/2008 13:00	6004.992358	6038.971029	1.005660642	0.00010461
10/15/2008 14:00	10/16/2008 14:00	6004.941333	6038.827806	1.005645366	0.000119831
10/15/2008 15:00	10/16/2008 15:00	6005.006737	6037.838518	1.005469658	0.000294594
10/15/2008 16:00	10/16/2008 16:00	6004.864082	6037.882134	1.005500829	0.000263605
10/15/2008 17:00	10/16/2008 17:00	6004.645573	6037.623641	1.005494366	0.00027003
10/15/2008 18:00	10/16/2008 18:00	6004.499273	6037.647498	1.005522768	0.000241707
10/15/2008 19:00	10/16/2008 19:00	6004.515637	6037.952439	1.005570841	0.000193916
10/15/2008 20:00	10/16/2008 20:00	6004.482275	6038.04626	1.005592228	0.000172818
10/15/2008 21:00	10/16/2008 21:00	6004.494638	6037.976058	1.005578445	0.000186506
10/15/2008 22:00	10/16/2008 22:00	6004.368121	6037.893601	1.005585862	0.000179091
10/15/2008 23:00	10/16/2008 23:00	6004.352693	6037.921168	1.005592963	0.000171954
10/16/2008 0:00	10/17/2008 0:00	6004.15447	6037.526345	1.005560424	0.000204339
10/16/2008 1:00	10/17/2008 1:00	6004.146429	6037.47421	1.005553055	0.000211637
10/16/2008 2:00	10/17/2008 2:00	6004.034761	6037.290805	1.005541176	0.000223419
10/16/2008 3:00	10/17/2008 3:00	6003.848061	6037.685724	1.005638133	0.000126895
10/16/2008 4:00	10/17/2008 4:00	6003.651684	6037.178271	1.005586476	0.000178245
10/16/2008 5:00	10/17/2008 5:00	6003.613754	6036.921086	1.005549891	0.000214535
10/16/2008 6:00	10/17/2008 6:00	6003.077492	6037.093975	1.005668533	9.65514E-05
10/16/2008 7:00	10/17/2008 7:00	6002.951598	6036.843067	1.005647772	0.000117144
10/16/2008 8:00	10/17/2008 8:00	6002.970765	6036.760898	1.005630943	0.00013395
10/16/2008 9:00	10/17/2008 9:00	6002.890726	6036.987289	1.005682261	8.31097E-05
10/16/2008 10:00	10/17/2008 10:00	6002.663988	6037.091579	1.005737409	2.80595E-05
10/16/2008 11:00	10/17/2008 11:00	6002.599802	6036.92731	1.005720797	4.45774E-05
10/16/2008 12:00	10/17/2008 12:00	6002.516963	6037.078714	1.005759928	5.69645E-06
10/16/2008 13:00	10/17/2008 13:00	6002.398969	6036.690722	1.005715036	5.03103E-05
10/16/2008 14:00	10/17/2008 14:00	6002.462318	6036.961947	1.00574946	1.59347E-05
10/16/2008 15:00	10/17/2008 15:00	6002.766773	6037.334204	1.005760576	4.99405E-06
10/16/2008 16:00	10/17/2008 16:00	6002.879073	6037.47418	1.005765084	5.17061E-07
10/16/2008 17:00	10/17/2008 17:00	6002.972227	6037.562932	1.005764262	1.33509E-06
10/16/2008 18:00	10/17/2008 18:00	6003.134341	6037.134719	1.005665846	9.92725E-05
10/16/2008 19:00	10/17/2008 19:00	6003.254495	6037.146402	1.005647755	0.000117354
10/16/2008 20:00	10/17/2008 20:00	6003.314861	6036.962848	1.005606987	0.00015782
10/16/2008 21:00	10/17/2008 21:00	6003.263589	6036.779872	1.005585162	0.000179593
10/16/2008 22:00	10/17/2008 22:00	6003.393888	6037.134177	1.0056225	0.000142602

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/16/2008 23:00	10/17/2008 23:00	6003.296746	6036.779115	1.005579749	0.000185242
10/17/2008 0:00	10/18/2008 0:00	6003.480031	6036.78313	1.005549713	0.000215113
10/17/2008 1:00	10/18/2008 1:00	6003.451548	6036.884819	1.00557136	0.00019352
10/17/2008 2:00	10/18/2008 2:00	6003.604214	6036.932226	1.005553807	0.0002111
10/17/2008 3:00	10/18/2008 3:00	6003.620208	6036.479814	1.005475704	0.000288727
10/17/2008 4:00	10/18/2008 4:00	6003.742628	6036.408883	1.005443492	0.000320878
10/17/2008 5:00	10/18/2008 5:00	6003.793536	6036.340035	1.00542364	0.000340769
10/17/2008 6:00	10/18/2008 6:00	6004.176767	6036.276049	1.005348722	0.000415227
10/17/2008 7:00	10/18/2008 7:00	6004.391451	6035.85668	1.005242971	0.000520509
10/17/2008 8:00	10/18/2008 8:00	6004.33276	6035.937345	1.005266205	0.000497358
10/17/2008 9:00	10/18/2008 9:00	6004.432206	6035.643699	1.005200609	0.000562606
10/17/2008 10:00	10/18/2008 10:00	6004.520809	6035.939036	1.005234976	0.000528412
10/17/2008 11:00	10/18/2008 11:00	6004.673419	6036.424061	1.005290227	0.000473447
10/17/2008 12:00	10/18/2008 12:00	6004.783784	6035.924881	1.005188459	0.000574578
10/17/2008 13:00	10/18/2008 13:00	6004.83431	6036.269369	1.005237372	0.000525894
10/17/2008 14:00	10/18/2008 14:00	6005.013131	6036.215574	1.005198549	0.000564606
10/17/2008 15:00	10/18/2008 15:00	6004.908666	6036.483357	1.005260547	0.000502815
10/17/2008 16:00	10/18/2008 16:00	6004.918595	6036.435751	1.005251011	0.00051236
10/17/2008 17:00	10/18/2008 17:00	6004.92122	6036.112162	1.005196667	0.000566434
10/17/2008 18:00	10/18/2008 18:00	6005.230055	6037.002889	1.005293202	0.000470257
10/17/2008 19:00	10/18/2008 19:00	6005.451506	6037.220165	1.005292214	0.000471143
10/17/2008 20:00	10/18/2008 20:00	6005.523847	6037.545094	1.005334102	0.000429351
10/17/2008 21:00	10/18/2008 21:00	6005.659013	6037.825821	1.005358321	0.000405352
10/17/2008 22:00	10/18/2008 22:00	6005.656914	6037.570594	1.00531606	0.000447292
10/17/2008 23:00	10/18/2008 23:00	6005.775642	6037.916458	1.005353695	0.000409762
10/18/2008 0:00	10/19/2008 0:00	6005.831013	6038.302944	1.005408784	0.000354953
10/18/2008 1:00	10/19/2008 1:00	6006.105786	6038.956971	1.005471629	0.000292375
10/18/2008 2:00	10/19/2008 2:00	6006.170123	6039.18374	1.005498481	0.000265529
10/18/2008 3:00	10/19/2008 3:00	6006.335483	6039.4435	1.005514043	0.000250045
10/18/2008 4:00	10/19/2008 4:00	6006.5797	6039.937157	1.005555419	0.000208959
10/18/2008 5:00	10/19/2008 5:00	6006.680584	6039.99533	1.005548146	0.000216125
10/18/2008 6:00	10/19/2008 6:00	6006.572713	6039.909769	1.005551983	0.000212331
10/18/2008 7:00	10/19/2008 7:00	6006.619999	6040.71584	1.005678385	8.67362E-05
10/18/2008 8:00	10/19/2008 8:00	6006.735465	6040.791774	1.005671792	9.33894E-05
10/18/2008 9:00	10/19/2008 9:00	6006.846162	6040.857182	1.00566405	0.000100991
10/18/2008 10:00	10/19/2008 10:00	6006.831182	6041.186662	1.005721529	4.39527E-05
10/18/2008 11:00	10/19/2008 11:00	6006.866826	6041.231761	1.005723065	4.24213E-05
10/18/2008 12:00	10/19/2008 12:00	6006.849347	6041.761203	1.005814387	-4.81224E-05
10/18/2008 13:00	10/19/2008 13:00	6006.863071	6041.702764	1.005802383	-3.61657E-05
10/18/2008 14:00	10/19/2008 14:00	6006.567853	6041.390748	1.005799952	-3.36688E-05
10/18/2008 15:00	10/19/2008 15:00	6006.524801	6041.102674	1.005759266	6.84785E-06
10/18/2008 16:00	10/19/2008 16:00	6006.525667	6040.910771	1.005727145	3.87594E-05
10/18/2008 17:00	10/19/2008 17:00	6006.592868	6041.083242	1.005744693	2.13967E-05
10/18/2008 18:00	10/19/2008 18:00	6006.210312	6040.34646	1.005686185	7.96776E-05
10/18/2008 19:00	10/19/2008 19:00	6005.795906	6039.966593	1.005692373	7.35688E-05
10/18/2008 20:00	10/19/2008 20:00	6005.628052	6040.010625	1.005727986	3.83277E-05
10/18/2008 21:00	10/19/2008 21:00	6005.693652	6039.715505	1.005667747	9.81168E-05

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/18/2008 22:00	10/19/2008 22:00	6005.701941	6039.359413	1.005607021	0.000158465
10/18/2008 23:00	10/19/2008 23:00	6005.5949	6039.252333	1.005607153	0.000158372
10/19/2008 0:00	10/20/2008 0:00	6005.568578	6039.342869	1.005626634	0.000138995

Max	**6006.867**	**6041.761**	**1.005814**	**0.000575**
Min	**6002.399**	**6035.644**	**1.005188**	**-0.000048**
Range	**4.468**	**6.118**	**0.000626**	**0.000623**
Median	**6004.646**	**6037.826**	**1.005607**	**0.000158**
Average	**6004.699**	**6038.131**	**1.005570**	**0.000195**
StDev	**1.241**	**1.565**	**0.000170**	**0.000170**
Count	**97**	**97**	**97**	**97**

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/6/2007 0:00	10/7/2007 0:00	5922.5879	5965.539106	1.007252603	4.98795E-07
10/6/2007 1:00	10/7/2007 1:00	5922.56368	5965.891538	1.007316241	-6.26649E-05
10/6/2007 2:00	10/7/2007 2:00	5922.482574	5966.184895	1.007379526	-0.000125525
10/6/2007 3:00	10/7/2007 3:00	5922.413482	5966.077224	1.007373066	-0.000119145
10/6/2007 4:00	10/7/2007 4:00	5922.373515	5966.080287	1.00738051	-0.000126405
10/6/2007 5:00	10/7/2007 5:00	5922.437159	5965.884999	1.007336642	-8.29302E-05
10/6/2007 6:00	10/7/2007 6:00	5922.507508	5965.952908	1.00733616	-8.24347E-05
10/6/2007 7:00	10/7/2007 7:00	5922.677674	5966.447924	1.00739091	-0.000136667
10/6/2007 8:00	10/7/2007 8:00	5922.719629	5966.51676	1.007395388	-0.00014112
10/6/2007 9:00	10/7/2007 9:00	5922.732675	5966.429297	1.00737841	-0.00012426
10/6/2007 10:00	10/7/2007 10:00	5922.756417	5965.955226	1.007294393	-4.0799E-05
10/6/2007 11:00	10/7/2007 11:00	5922.758619	5965.525973	1.007221467	3.15254E-05
10/6/2007 12:00	10/7/2007 12:00	5922.771076	5965.758078	1.007258461	-5.27871E-06
10/6/2007 13:00	10/7/2007 13:00	5922.847895	5965.7447	1.007243083	9.93363E-06
10/6/2007 14:00	10/7/2007 14:00	5922.936602	5965.325231	1.007157291	9.52306E-05
10/6/2007 15:00	10/7/2007 15:00	5922.953219	5965.409173	1.007168632	8.39635E-05
10/6/2007 16:00	10/7/2007 16:00	5922.990708	5965.716755	1.007214189	3.87305E-05
10/6/2007 17:00	10/7/2007 17:00	5923.069037	5966.40815	1.007317509	-6.39316E-05
10/6/2007 18:00	10/7/2007 18:00	5923.059074	5966.767139	1.007379867	-0.000125774
10/6/2007 19:00	10/7/2007 19:00	5923.125016	5966.804046	1.007374964	-0.000120827
10/6/2007 20:00	10/7/2007 20:00	5923.163592	5966.370634	1.007295193	-4.16813E-05
10/6/2007 21:00	10/7/2007 21:00	5923.268784	5966.639195	1.007322642	-6.89319E-05
10/6/2007 22:00	10/7/2007 22:00	5923.427827	5966.578983	1.007285429	-3.19921E-05
10/6/2007 23:00	10/7/2007 23:00	5923.478203	5966.757265	1.007306953	-5.33663E-05
10/7/2007 0:00	10/8/2007 0:00	5923.443678	5966.19173	1.007217433	3.55898E-05
10/7/2007 1:00	10/8/2007 1:00	5923.417493	5966.200605	1.007223402	2.96814E-05
10/7/2007 2:00	10/8/2007 2:00	5923.407562	5965.90152	1.007174545	7.81388E-05
10/7/2007 3:00	10/8/2007 3:00	5923.341387	5965.852411	1.007177624	7.51983E-05
10/7/2007 4:00	10/8/2007 4:00	5923.420607	5965.978537	1.007185406	6.74308E-05
10/7/2007 5:00	10/8/2007 5:00	5923.527149	5966.418411	1.007241628	1.16874E-05
10/7/2007 6:00	10/8/2007 6:00	5923.649886	5966.18005	1.007180472	7.23612E-05
10/7/2007 7:00	10/8/2007 7:00	5923.815861	5966.439097	1.007195875	5.69606E-05
10/7/2007 8:00	10/8/2007 8:00	5923.880779	5966.478667	1.007191556	6.12874E-05
10/7/2007 9:00	10/8/2007 9:00	5923.913845	5966.349514	1.007164203	8.85179E-05
10/7/2007 10:00	10/8/2007 10:00	5923.898713	5966.503487	1.007192714	6.01549E-05
10/7/2007 11:00	10/8/2007 11:00	5923.85631	5966.917239	1.007269815	-1.63482E-05
10/7/2007 12:00	10/8/2007 12:00	5923.902987	5967.542812	1.007367595	-0.000113297
10/7/2007 13:00	10/8/2007 13:00	5923.911667	5967.493044	1.007357843	-0.000103493
10/7/2007 14:00	10/8/2007 14:00	5923.909072	5967.745316	1.007400894	-0.000146199
10/7/2007 15:00	10/8/2007 15:00	5923.908749	5967.589752	1.007374725	-0.00012019
10/7/2007 16:00	10/8/2007 16:00	5923.885678	5967.56433	1.007374352	-0.000119824
10/7/2007 17:00	10/8/2007 17:00	5923.745848	5967.645229	1.007411912	-0.00015698
10/7/2007 18:00	10/8/2007 18:00	5923.767506	5967.719963	1.007420896	-0.000165846
10/7/2007 19:00	10/8/2007 19:00	5923.743171	5968.020871	1.007475718	-0.000220365
10/7/2007 20:00	10/8/2007 20:00	5923.562638	5968.129835	1.007524772	-0.000269087
10/7/2007 21:00	10/8/2007 21:00	5923.352477	5967.718328	1.007491033	-0.000235622
10/7/2007 22:00	10/8/2007 22:00	5923.191207	5966.989185	1.007395355	-0.000140678

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/7/2007 23:00	10/8/2007 23:00	5923.089145	5966.814193	1.007383141	-0.000128583
10/8/2007 0:00	10/9/2007 0:00	5923.014733	5967.426161	1.007499032	-0.000243681
10/8/2007 1:00	10/9/2007 1:00	5922.932257	5967.132683	1.007463452	-0.000208433
10/8/2007 2:00	10/9/2007 2:00	5922.846957	5967.249112	1.007497626	-0.000242339
10/8/2007 3:00	10/9/2007 3:00	5922.882268	5967.067057	1.007460861	-0.000205875
10/8/2007 4:00	10/9/2007 4:00	5922.886358	5966.952631	1.007440861	-0.000186012
10/8/2007 5:00	10/9/2007 5:00	5922.706968	5966.477036	1.007391057	-0.0001366
10/8/2007 6:00	10/9/2007 6:00	5922.774352	5966.920931	1.007454552	-0.000199608
10/8/2007 7:00	10/9/2007 7:00	5922.707948	5967.100404	1.007496167	-0.000240888
10/8/2007 8:00	10/9/2007 8:00	5922.685549	5966.901199	1.007466278	-0.000211292
10/8/2007 9:00	10/9/2007 9:00	5922.61272	5967.729923	1.00761854	-0.000362423
10/8/2007 10:00	10/9/2007 10:00	5922.601041	5967.372062	1.00756017	-0.000304446
10/8/2007 11:00	10/9/2007 11:00	5922.623761	5967.240987	1.007534125	-0.000278652
10/8/2007 12:00	10/9/2007 12:00	5922.40438	5966.644918	1.007470869	-0.000215814
10/8/2007 13:00	10/9/2007 13:00	5922.272251	5966.907569	1.007537633	-0.000282127
10/8/2007 14:00	10/9/2007 14:00	5922.173751	5966.593711	1.007501354	-0.000246168
10/8/2007 15:00	10/9/2007 15:00	5922.07521	5966.954933	1.007579081	-0.000323324
10/8/2007 16:00	10/9/2007 16:00	5921.966278	5966.471011	1.007515949	-0.000260633
10/8/2007 17:00	10/9/2007 17:00	5921.971037	5966.367759	1.00749763	-0.000242529
10/8/2007 18:00	10/9/2007 18:00	5921.856946	5966.07687	1.007467845	-0.000213045
10/8/2007 19:00	10/9/2007 19:00	5921.944814	5966.130039	1.00746193	-0.00020712
10/8/2007 20:00	10/9/2007 20:00	5922.18088	5966.340172	1.007457312	-0.00020248
10/8/2007 21:00	10/9/2007 21:00	5922.411302	5966.290176	1.007409745	-0.000155201
10/8/2007 22:00	10/9/2007 22:00	5922.622988	5966.844259	1.007467327	-0.000212312
10/8/2007 23:00	10/9/2007 23:00	5922.75692	5966.968821	1.007465584	-0.000210575
10/9/2007 0:00	10/10/2007 0:00	5922.752275	5967.175448	1.007501338	-0.000245979
10/9/2007 1:00	10/10/2007 1:00	5922.764932	5967.938181	1.007627998	-0.000371616
10/9/2007 2:00	10/10/2007 2:00	5922.749975	5967.808409	1.007608668	-0.000352404
10/9/2007 3:00	10/10/2007 3:00	5922.769448	5968.149518	1.007662906	-0.000406252
10/9/2007 4:00	10/10/2007 4:00	5922.714229	5967.833464	1.007618898	-0.000362634
10/9/2007 5:00	10/10/2007 5:00	5922.874528	5968.083983	1.00763391	-0.000377541
10/9/2007 6:00	10/10/2007 6:00	5922.759444	5967.956176	1.007631949	-0.000375557
10/9/2007 7:00	10/10/2007 7:00	5922.729301	5967.145389	1.007500145	-0.000244821
10/9/2007 8:00	10/10/2007 8:00	5922.623591	5967.005429	1.0074945	-0.000239215
10/9/2007 9:00	10/10/2007 9:00	5922.588189	5966.715377	1.007451587	-0.000196591
10/9/2007 10:00	10/10/2007 10:00	5922.468173	5967.256619	1.007563321	-0.000307534
10/9/2007 11:00	10/10/2007 11:00	5922.618609	5967.389225	1.007560147	-0.000304356
10/9/2007 12:00	10/10/2007 12:00	5922.936944	5967.551398	1.007533382	-0.000277793
10/9/2007 13:00	10/10/2007 13:00	5923.025027	5967.546723	1.007517692	-0.000262142
10/9/2007 14:00	10/10/2007 14:00	5922.949079	5968.09321	1.007622923	-0.000366504
10/9/2007 15:00	10/10/2007 15:00	5922.978065	5967.972194	1.007597585	-0.000341342
10/9/2007 16:00	10/10/2007 16:00	5923.074893	5968.242422	1.007626728	-0.000370263
10/9/2007 17:00	10/10/2007 17:00	5923.078593	5968.017603	1.00758827	-0.000331981
10/9/2007 18:00	10/10/2007 18:00	5923.114662	5968.462489	1.007657305	-0.000400409
10/9/2007 19:00	10/10/2007 19:00	5923.110853	5968.046093	1.007587649	-0.000331309
10/9/2007 20:00	10/10/2007 20:00	5923.079185	5968.34123	1.007642789	-0.000386087
10/9/2007 21:00	10/10/2007 21:00	5923.021101	5968.595224	1.007695499	-0.000438428

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/9/2007 22:00	10/10/2007 22:00	5922.880984	5968.473541	1.007698835	-0.000441696
10/9/2007 23:00	10/10/2007 23:00	5922.661876	5967.829479	1.007627306	-0.000370802
10/10/2007 0:00	10/11/2007 0:00	5922.555293	5967.236669	1.007545285	-0.000289486

Max	**5923.914**	**5968.595**	**1.007699**	**0.000095**
Min	**5921.857**	**5965.325**	**1.007157**	**-0.000442**
Range	**2.057**	**3.270**	**0.000542**	**0.000537**
Median	**5922.881**	**5966.908**	**1.007452**	**-0.000197**
Average	**5922.953**	**5966.930**	**1.007426**	**-0.000171**
StDev	**0.509**	**0.806**	**0.000146**	**0.000145**
Count	**97**	**97**	**97**	**97**

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/15/2008 0:00	10/16/2008 0:00	5917.375907	5954.43058	1.006263631	1.60979E-06
10/15/2008 1:00	10/16/2008 1:00	5917.534437	5955.173603	1.006362268	-9.63725E-05
10/15/2008 2:00	10/16/2008 2:00	5917.608752	5955.71418	1.006441072	-0.000174574
10/15/2008 3:00	10/16/2008 3:00	5917.594124	5955.586851	1.00642219	-0.000155669
10/15/2008 4:00	10/16/2008 4:00	5917.884271	5956.311941	1.006495411	-0.000228367
10/15/2008 5:00	10/16/2008 5:00	5918.077024	5956.110085	1.006428416	-0.00016192
10/15/2008 6:00	10/16/2008 6:00	5918.207128	5955.978793	1.006384155	-0.000117898
10/15/2008 7:00	10/16/2008 7:00	5918.182882	5955.929312	1.006379891	-0.000113688
10/15/2008 8:00	10/16/2008 8:00	5918.336833	5955.897872	1.006348313	-8.23994E-05
10/15/2008 9:00	10/16/2008 9:00	5918.512051	5956.162484	1.006363045	-9.722E-05
10/15/2008 10:00	10/16/2008 10:00	5918.564949	5956.035389	1.006332687	-6.69461E-05
10/15/2008 11:00	10/16/2008 11:00	5918.505679	5955.889037	1.006317942	-5.23891E-05
10/15/2008 12:00	10/16/2008 12:00	5918.511076	5956.091149	1.006351145	-8.54092E-05
10/15/2008 13:00	10/16/2008 13:00	5918.507308	5956.178655	1.006366655	-0.000100736
10/15/2008 14:00	10/16/2008 14:00	5918.593894	5955.823205	1.006291793	-2.64318E-05
10/15/2008 15:00	10/16/2008 15:00	5918.558546	5956.547224	1.006420048	-0.00015395
10/15/2008 16:00	10/16/2008 16:00	5918.449076	5956.949587	1.006506735	-0.000239977
10/15/2008 17:00	10/16/2008 17:00	5918.533529	5957.181014	1.006531313	-0.000264551
10/15/2008 18:00	10/16/2008 18:00	5918.612619	5957.437641	1.00656123	-0.000294257
10/15/2008 19:00	10/16/2008 19:00	5918.48642	5958.434942	1.006751233	-0.000482897
10/15/2008 20:00	10/16/2008 20:00	5918.492759	5958.799486	1.00681185	-0.000542974
10/15/2008 21:00	10/16/2008 21:00	5918.57543	5959.040959	1.006838742	-0.000569514
10/15/2008 22:00	10/16/2008 22:00	5918.460357	5959.053696	1.006860472	-0.000591082
10/15/2008 23:00	10/16/2008 23:00	5918.471402	5958.999061	1.006849455	-0.000580054
10/16/2008 0:00	10/17/2008 0:00	5918.412347	5959.412106	1.00692915	-0.000659295
10/16/2008 1:00	10/17/2008 1:00	5918.318021	5958.692751	1.006823544	-0.00055458
10/16/2008 2:00	10/17/2008 2:00	5918.300317	5958.881643	1.006858422	-0.000589251
10/16/2008 3:00	10/17/2008 3:00	5918.247983	5958.957505	1.006880049	-0.000610812
10/16/2008 4:00	10/17/2008 4:00	5918.070823	5958.606259	1.006850872	-0.000581818
10/16/2008 5:00	10/17/2008 5:00	5918.020045	5958.702389	1.006875877	-0.000606517
10/16/2008 6:00	10/17/2008 6:00	5917.714114	5959.193849	1.007010979	-0.000740597
10/16/2008 7:00	10/17/2008 7:00	5917.562016	5958.76397	1.006964249	-0.000694193
10/16/2008 8:00	10/17/2008 8:00	5917.429053	5958.807316	1.006994184	-0.000723915
10/16/2008 9:00	10/17/2008 9:00	5917.263077	5958.627699	1.006992322	-0.000721822
10/16/2008 10:00	10/17/2008 10:00	5917.131882	5958.647437	1.00701779	-0.000747288
10/16/2008 11:00	10/17/2008 11:00	5917.1079	5958.498536	1.006996703	-0.000726367
10/16/2008 12:00	10/17/2008 12:00	5917.090472	5957.962228	1.006908951	-0.000639361
10/16/2008 13:00	10/17/2008 13:00	5917.243546	5958.698151	1.007007319	-0.000736935
10/16/2008 14:00	10/17/2008 14:00	5917.202384	5959.60912	1.00716814	-0.00089663
10/16/2008 15:00	10/17/2008 15:00	5917.164238	5958.70747	1.007022368	-0.000751891
10/16/2008 16:00	10/17/2008 16:00	5917.210471	5958.538464	1.006985769	-0.000715741
10/16/2008 17:00	10/17/2008 17:00	5917.230023	5957.954944	1.006883954	-0.000614569
10/16/2008 18:00	10/17/2008 18:00	5917.373161	5957.589665	1.006798007	-0.000529117
10/16/2008 19:00	10/17/2008 19:00	5917.592517	5956.682113	1.006607473	-0.000339783
10/16/2008 20:00	10/17/2008 20:00	5917.574607	5956.335421	1.00655193	-0.000284623
10/16/2008 21:00	10/17/2008 21:00	5917.616531	5956.153952	1.006513971	-0.000247082
10/16/2008 22:00	10/17/2008 22:00	5917.659279	5956.393765	1.006547105	-0.000280111

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/16/2008 23:00	10/17/2008 23:00	5917.561403	5956.993825	1.006665205	-0.000397348
10/17/2008 0:00	10/18/2008 0:00	5917.501174	5957.126082	1.006697949	-0.000429715
10/17/2008 1:00	10/18/2008 1:00	5917.636364	5957.911837	1.006807899	-0.000538709
10/17/2008 2:00	10/18/2008 2:00	5917.769386	5957.868923	1.006777886	-0.000509043
10/17/2008 3:00	10/18/2008 3:00	5917.95125	5958.437011	1.006843007	-0.000573623
10/17/2008 4:00	10/18/2008 4:00	5918.051958	5958.551061	1.006845181	-0.000575746
10/17/2008 5:00	10/18/2008 5:00	5918.14846	5958.805561	1.006871759	-0.000602135
10/17/2008 6:00	10/18/2008 6:00	5918.429312	5958.735023	1.006812084	-0.000542876
10/17/2008 7:00	10/18/2008 7:00	5918.629942	5959.026249	1.006827172	-0.000557842
10/17/2008 8:00	10/18/2008 8:00	5918.676527	5959.345368	1.006873233	-0.000603495
10/17/2008 9:00	10/18/2008 9:00	5918.820702	5959.354331	1.006850254	-0.000580654
10/17/2008 10:00	10/18/2008 10:00	5918.961309	5959.800432	1.0069019	-0.000631722
10/17/2008 11:00	10/18/2008 11:00	5919.141374	5959.49078	1.006818915	-0.000549391
10/17/2008 12:00	10/18/2008 12:00	5919.324348	5959.957005	1.006866707	-0.000596681
10/17/2008 13:00	10/18/2008 13:00	5919.204131	5959.749456	1.006852039	-0.000582175
10/17/2008 14:00	10/18/2008 14:00	5919.095838	5959.556711	1.00683801	-0.000568137
10/17/2008 15:00	10/18/2008 15:00	5919.132245	5960.128287	1.006928374	-0.000657835
10/17/2008 16:00	10/18/2008 16:00	5919.07798	5959.906611	1.006900332	-0.000629827
10/17/2008 17:00	10/18/2008 17:00	5919.027794	5959.69996	1.006874054	-0.000603648
10/17/2008 18:00	10/18/2008 18:00	5918.670579	5959.714005	1.006937125	-0.000666317
10/17/2008 19:00	10/18/2008 19:00	5918.322837	5960.410612	1.007113764	-0.000841819
10/17/2008 20:00	10/18/2008 20:00	5918.523814	5960.817566	1.0071484	-0.000876105
10/17/2008 21:00	10/18/2008 21:00	5918.688052	5961.311538	1.007203918	-0.000931172
10/17/2008 22:00	10/18/2008 22:00	5918.63106	5961.026425	1.00716561	-0.000893008
10/17/2008 23:00	10/18/2008 23:00	5918.807239	5960.965705	1.007125338	-0.00085309
10/18/2008 0:00	10/19/2008 0:00	5919.026244	5961.0412	1.007100652	-0.000828775
10/18/2008 1:00	10/19/2008 1:00	5919.01407	5960.939033	1.007085339	-0.000813705
10/18/2008 2:00	10/19/2008 2:00	5919.079654	5960.879472	1.007064222	-0.000792649
10/18/2008 3:00	10/19/2008 3:00	5919.154523	5960.973123	1.007067275	-0.000795709
10/18/2008 4:00	10/19/2008 4:00	5919.084014	5961.350002	1.007142942	-0.000870781
10/18/2008 5:00	10/19/2008 5:00	5919.074861	5961.303327	1.007136535	-0.000864503
10/18/2008 6:00	10/19/2008 6:00	5918.916455	5960.595807	1.007043849	-0.000772648
10/18/2008 7:00	10/19/2008 7:00	5918.945698	5960.898597	1.00708995	-0.000818468
10/18/2008 8:00	10/19/2008 8:00	5918.834293	5961.10023	1.007143263	-0.000871071
10/18/2008 9:00	10/19/2008 9:00	5918.985366	5961.043782	1.007108027	-0.000836108
10/18/2008 10:00	10/19/2008 10:00	5919.073788	5960.690158	1.007033255	-0.000761904
10/18/2008 11:00	10/19/2008 11:00	5919.090446	5960.640238	1.00702197	-0.000750724
10/18/2008 12:00	10/19/2008 12:00	5918.995508	5960.562844	1.007025153	-0.000753777
10/18/2008 13:00	10/19/2008 13:00	5919.003809	5960.623185	1.007033951	-0.000762491
10/18/2008 14:00	10/19/2008 14:00	5918.967102	5960.590158	1.007034496	-0.000763151
10/18/2008 15:00	10/19/2008 15:00	5919.009515	5960.397473	1.00699484	-0.000723688
10/18/2008 16:00	10/19/2008 16:00	5919.098661	5960.090663	1.006927774	-0.000657197
10/18/2008 17:00	10/19/2008 17:00	5918.929383	5960.285903	1.006989558	-0.000718511
10/18/2008 18:00	10/19/2008 18:00	5919.214424	5960.948791	1.007053056	-0.000781519
10/18/2008 19:00	10/19/2008 19:00	5919.081977	5960.060847	1.006925568	-0.000655014
10/18/2008 20:00	10/19/2008 20:00	5918.815917	5960.229294	1.006999302	-0.000728176
10/18/2008 21:00	10/19/2008 21:00	5918.614476	5959.934343	1.00698377	-0.000712734

Low Time Limit	Upper Time Limit	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
10/18/2008 22:00	10/19/2008 22:00	5918.655383	5959.947065	1.006978985	-0.000707961
10/18/2008 23:00	10/19/2008 23:00	5918.515676	5959.277588	1.006889535	-0.000619289
10/19/2008 0:00	10/20/2008 0:00	5918.412453	5959.154938	1.006886561	-0.00061615

Max	**5919.324**	**5961.350**	**1.007204**	**0.000002**
Min	**5917.090**	**5954.431**	**1.006264**	**-0.000931**
Range	**2.234**	**6.919**	**0.000940**	**0.000933**
Median	**5918.507**	**5958.958**	**1.006876**	**-0.000607**
Average	**5918.356**	**5958.747**	**1.006827**	**-0.000557**
StDev	**0.638**	**1.770**	**0.000252**	**0.000250**
Count	**97**	**97**	**97**	**97**

Unit 1, Header 11, 2007

	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
Max	5932.896	5905.675	0.996381	0.000485
Min	5882.275	5857.600	0.995329	-0.000571
Range	50.621	48.075	0.001052	0.001056
Median	5926.331	5901.055	0.995761	0.000050
Average	5921.878	5896.763	0.995762	0.000049
StDev	12.238	11.073	0.000283	0.000284
Count	97	97	97	97

Unit 1, Header 12, 2007

	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
Max	5886.779	5879.154	0.999182	0.000134
Min	5839.366	5832.252	0.998652	-0.000396
Range	47.413	46.901	0.000529	0.000530
Median	5878.840	5871.832	0.998827	-0.000041
Average	5875.693	5868.949	0.998854	-0.000068
StDev	10.968	10.740	0.000138	0.000138
Count	97	97	97	97

Unit 1, Header 11, 2008

	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
Max	5928.207	5905.890	0.996311	0.000595
Min	5925.880	5901.310	0.995516	-0.000203
Range	2.326	4.580	0.000795	0.000798
Median	5927.339	5903.158	0.995942	0.000168
Average	5927.362	5903.259	0.995936	0.000174
StDev	0.650	0.980	0.000188	0.000189
Count	97	97	97	97

Unit 1, Header 12, 2008

	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
Max	5869.228	5855.640	0.997861	0.000729
Min	5866.923	5850.753	0.996998	-0.000137
Range	2.305	4.887	0.000863	0.000865
Median	5868.284	5853.555	0.997465	0.000260
Average	5868.252	5853.367	0.997465	0.000260
StDev	0.539	1.308	0.000246	0.000246
Count	97	97	97	97

Unit 2, Header 21, 2007

	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
Max	6010.553	6042.362	1.005422	0.000626
Min	6008.920	6038.467	1.004662	-0.000132
Range	1.633	3.894	0.000761	0.000757
Median	6009.569	6039.786	1.005059	0.000231
Average	6009.663	6039.971	1.005044	0.000245
StDev	0.454	1.007	0.000167	0.000166
Count	97	97	97	97

Unit 2, Header 22, 2007

	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
Max	5923.914	5968.595	1.007699	0.000095
Min	5921.857	5965.325	1.007157	-0.000442
Range	2.057	3.270	0.000542	0.000537
Median	5922.881	5966.908	1.007452	-0.000197
Average	5922.953	5966.930	1.007426	-0.000171
StDev	0.509	0.806	0.000146	0.000145
Count	97	97	97	97

Unit 2, Header 21, 2008

	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
Max	6006.867	6041.761	1.005814	0.000575
Min	6002.399	6035.644	1.005188	-0.000048
Range	4.468	6.118	0.000626	0.000623
Median	6004.646	6037.826	1.005607	0.000158
Average	6004.699	6038.131	1.005570	0.000195
StDev	1.241	1.565	0.000170	0.000170
Count	97	97	97	97

Unit 2, Header 22, 2008

	Avg Fv	Avg Fui	Avg CF	Dev Using Init CF
Max	5919.324	5961.350	1.007204	0.000002
Min	5917.090	5954.431	1.006264	-0.000931
Range	2.234	6.919	0.000940	0.000933
Median	5918.507	5958.958	1.006876	-0.000607
Average	5918.356	5958.747	1.006827	-0.000557
StDev	0.638	1.770	0.000252	0.000250
Count	97	97	97	97

Low Time Limit	Upper Time Limit	Avg Hdr CF for 11 and 12
10/1/2007 0:00	10/2/2007 0:00	0.997295969
10/1/2007 1:00	10/2/2007 1:00	0.997360562
10/1/2007 2:00	10/2/2007 2:00	0.997433119
10/1/2007 3:00	10/2/2007 3:00	0.997458585
10/1/2007 4:00	10/2/2007 4:00	0.997471013
10/1/2007 5:00	10/2/2007 5:00	0.997514661
10/1/2007 6:00	10/2/2007 6:00	0.997628241
10/1/2007 7:00	10/2/2007 7:00	0.997632177
10/1/2007 8:00	10/2/2007 8:00	0.997648558
10/1/2007 9:00	10/2/2007 9:00	0.997707488
10/1/2007 10:00	10/2/2007 10:00	0.99768628
10/1/2007 11:00	10/2/2007 11:00	0.997625014
10/1/2007 12:00	10/2/2007 12:00	0.99764627
10/1/2007 13:00	10/2/2007 13:00	0.997625536
10/1/2007 14:00	10/2/2007 14:00	0.997751271
10/1/2007 15:00	10/2/2007 15:00	0.99772898
10/1/2007 16:00	10/2/2007 16:00	0.997634454
10/1/2007 17:00	10/2/2007 17:00	0.997577927
10/1/2007 18:00	10/2/2007 18:00	0.997511104
10/1/2007 19:00	10/2/2007 19:00	0.997512799
10/1/2007 20:00	10/2/2007 20:00	0.997431299
10/1/2007 21:00	10/2/2007 21:00	0.99741729
10/1/2007 22:00	10/2/2007 22:00	0.997367639
10/1/2007 23:00	10/2/2007 23:00	0.997430493
10/2/2007 0:00	10/3/2007 0:00	0.997403623
10/2/2007 1:00	10/3/2007 1:00	0.997390308
10/2/2007 2:00	10/3/2007 2:00	0.997342523
10/2/2007 3:00	10/3/2007 3:00	0.997367891
10/2/2007 4:00	10/3/2007 4:00	0.997325186
10/2/2007 5:00	10/3/2007 5:00	0.997224873
10/2/2007 6:00	10/3/2007 6:00	0.997144118
10/2/2007 7:00	10/3/2007 7:00	0.997221312
10/2/2007 8:00	10/3/2007 8:00	0.997125446
10/2/2007 9:00	10/3/2007 9:00	0.997039096
10/2/2007 10:00	10/3/2007 10:00	0.997048305
10/2/2007 11:00	10/3/2007 11:00	0.997077927
10/2/2007 12:00	10/3/2007 12:00	0.997057754
10/2/2007 13:00	10/3/2007 13:00	0.997106022
10/2/2007 14:00	10/3/2007 14:00	0.997022172
10/2/2007 15:00	10/3/2007 15:00	0.997036778
10/2/2007 16:00	10/3/2007 16:00	0.997052842
10/2/2007 17:00	10/3/2007 17:00	0.997033637
10/2/2007 18:00	10/3/2007 18:00	0.997091984
10/2/2007 19:00	10/3/2007 19:00	0.997134141
10/2/2007 20:00	10/3/2007 20:00	0.99722193
10/2/2007 21:00	10/3/2007 21:00	0.997248686
10/2/2007 22:00	10/3/2007 22:00	0.997224387
10/2/2007 23:00	10/3/2007 23:00	0.997173293
10/3/2007 0:00	10/4/2007 0:00	0.997132815
10/3/2007 1:00	10/4/2007 1:00	0.997128024
10/3/2007 2:00	10/4/2007 2:00	0.997119094
10/3/2007 3:00	10/4/2007 3:00	0.997088646
10/3/2007 4:00	10/4/2007 4:00	0.997088968
10/3/2007 5:00	10/4/2007 5:00	0.997115445

Low Time Limit	Upper Time Limit	Avg Hdr CF for 11 and 12
10/3/2007 6:00	10/4/2007 6:00	0.997136595
10/3/2007 7:00	10/4/2007 7:00	0.997102181
10/3/2007 8:00	10/4/2007 8:00	0.997171523
10/3/2007 9:00	10/4/2007 9:00	0.997207998
10/3/2007 10:00	10/4/2007 10:00	0.997237964
10/3/2007 11:00	10/4/2007 11:00	0.997196435
10/3/2007 12:00	10/4/2007 12:00	0.997193474
10/3/2007 13:00	10/4/2007 13:00	0.997135288
10/3/2007 14:00	10/4/2007 14:00	0.997123542
10/3/2007 15:00	10/4/2007 15:00	0.997120068
10/3/2007 16:00	10/4/2007 16:00	0.997073736
10/3/2007 17:00	10/4/2007 17:00	0.997098145
10/3/2007 18:00	10/4/2007 18:00	0.997086172
10/3/2007 19:00	10/4/2007 19:00	0.997121328
10/3/2007 20:00	10/4/2007 20:00	0.997099378
10/3/2007 21:00	10/4/2007 21:00	0.997171186
10/3/2007 22:00	10/4/2007 22:00	0.997185221
10/3/2007 23:00	10/4/2007 23:00	0.997230382
10/4/2007 0:00	10/5/2007 0:00	0.997288592
10/4/2007 1:00	10/5/2007 1:00	0.997223795
10/4/2007 2:00	10/5/2007 2:00	0.9972632
10/4/2007 3:00	10/5/2007 3:00	0.997299435
10/4/2007 4:00	10/5/2007 4:00	0.997387212
10/4/2007 5:00	10/5/2007 5:00	0.997363114
10/4/2007 6:00	10/5/2007 6:00	0.99742973
10/4/2007 7:00	10/5/2007 7:00	0.997425358
10/4/2007 8:00	10/5/2007 8:00	0.997459642
10/4/2007 9:00	10/5/2007 9:00	0.997434582
10/4/2007 10:00	10/5/2007 10:00	0.997352669
10/4/2007 11:00	10/5/2007 11:00	0.99738948
10/4/2007 12:00	10/5/2007 12:00	0.997353391
10/4/2007 13:00	10/5/2007 13:00	0.997394332
10/4/2007 14:00	10/5/2007 14:00	0.997411397
10/4/2007 15:00	10/5/2007 15:00	0.997414861
10/4/2007 16:00	10/5/2007 16:00	0.997468649
10/4/2007 17:00	10/5/2007 17:00	0.997470622
10/4/2007 18:00	10/5/2007 18:00	0.997495575
10/4/2007 19:00	10/5/2007 19:00	0.997412595
10/4/2007 20:00	10/5/2007 20:00	0.997345292
10/4/2007 21:00	10/5/2007 21:00	0.997277977
10/4/2007 22:00	10/5/2007 22:00	0.997353351
10/4/2007 23:00	10/5/2007 23:00	0.997316137
10/5/2007 0:00	10/6/2007 0:00	0.997302826

Max	**0.997751**
Min	**0.997022**
Range	**0.000729**
Median	**0.997299**
Average	**0.997308**
StDev	**0.000191**
Count	**97**

Low Time Limit	Upper Time Limit	Avg Hdr CF for 11 and 12
10/1/2008 0:00	10/2/2008 0:00	0.996914925
10/1/2008 1:00	10/2/2008 1:00	0.996877627
10/1/2008 2:00	10/2/2008 2:00	0.996827503
10/1/2008 3:00	10/2/2008 3:00	0.996890998
10/1/2008 4:00	10/2/2008 4:00	0.996878055
10/1/2008 5:00	10/2/2008 5:00	0.996845758
10/1/2008 6:00	10/2/2008 6:00	0.996814369
10/1/2008 7:00	10/2/2008 7:00	0.996771607
10/1/2008 8:00	10/2/2008 8:00	0.996687071
10/1/2008 9:00	10/2/2008 9:00	0.996666389
10/1/2008 10:00	10/2/2008 10:00	0.996680989
10/1/2008 11:00	10/2/2008 11:00	0.996607141
10/1/2008 12:00	10/2/2008 12:00	0.996639093
10/1/2008 13:00	10/2/2008 13:00	0.996625319
10/1/2008 14:00	10/2/2008 14:00	0.996607706
10/1/2008 15:00	10/2/2008 15:00	0.996568744
10/1/2008 16:00	10/2/2008 16:00	0.996529854
10/1/2008 17:00	10/2/2008 17:00	0.996460598
10/1/2008 18:00	10/2/2008 18:00	0.996484087
10/1/2008 19:00	10/2/2008 19:00	0.99644427
10/1/2008 20:00	10/2/2008 20:00	0.996514651
10/1/2008 21:00	10/2/2008 21:00	0.996636197
10/1/2008 22:00	10/2/2008 22:00	0.996525571
10/1/2008 23:00	10/2/2008 23:00	0.996404422
10/2/2008 0:00	10/3/2008 0:00	0.996261985
10/2/2008 1:00	10/3/2008 1:00	0.996298447
10/2/2008 2:00	10/3/2008 2:00	0.996364767
10/2/2008 3:00	10/3/2008 3:00	0.996318198
10/2/2008 4:00	10/3/2008 4:00	0.996293882
10/2/2008 5:00	10/3/2008 5:00	0.996331908
10/2/2008 6:00	10/3/2008 6:00	0.996394358
10/2/2008 7:00	10/3/2008 7:00	0.996458044
10/2/2008 8:00	10/3/2008 8:00	0.996432848
10/2/2008 9:00	10/3/2008 9:00	0.996515473
10/2/2008 10:00	10/3/2008 10:00	0.996555099
10/2/2008 11:00	10/3/2008 11:00	0.996625008
10/2/2008 12:00	10/3/2008 12:00	0.99659263
10/2/2008 13:00	10/3/2008 13:00	0.996600936
10/2/2008 14:00	10/3/2008 14:00	0.996609387
10/2/2008 15:00	10/3/2008 15:00	0.996588406
10/2/2008 16:00	10/3/2008 16:00	0.996550233
10/2/2008 17:00	10/3/2008 17:00	0.996615249
10/2/2008 18:00	10/3/2008 18:00	0.996690038
10/2/2008 19:00	10/3/2008 19:00	0.996825325
10/2/2008 20:00	10/3/2008 20:00	0.996740604
10/2/2008 21:00	10/3/2008 21:00	0.996684316
10/2/2008 22:00	10/3/2008 22:00	0.99676615
10/2/2008 23:00	10/3/2008 23:00	0.996814122
10/3/2008 0:00	10/4/2008 0:00	0.996900713
10/3/2008 1:00	10/4/2008 1:00	0.996819151
10/3/2008 2:00	10/4/2008 2:00	0.996835969
10/3/2008 3:00	10/4/2008 3:00	0.996880371
10/3/2008 4:00	10/4/2008 4:00	0.996927975
10/3/2008 5:00	10/4/2008 5:00	0.996824433

Low Time Limit	Upper Time Limit	Avg Hdr CF for 11 and 12
10/3/2008 6:00	10/4/2008 6:00	0.996850337
10/3/2008 7:00	10/4/2008 7:00	0.996843859
10/3/2008 8:00	10/4/2008 8:00	0.99686257
10/3/2008 9:00	10/4/2008 9:00	0.996870356
10/3/2008 10:00	10/4/2008 10:00	0.996827499
10/3/2008 11:00	10/4/2008 11:00	0.996812878
10/3/2008 12:00	10/4/2008 12:00	0.996805468
10/3/2008 13:00	10/4/2008 13:00	0.996851505
10/3/2008 14:00	10/4/2008 14:00	0.996860696
10/3/2008 15:00	10/4/2008 15:00	0.996875256
10/3/2008 16:00	10/4/2008 16:00	0.996872416
10/3/2008 17:00	10/4/2008 17:00	0.996900209
10/3/2008 18:00	10/4/2008 18:00	0.996887576
10/3/2008 19:00	10/4/2008 19:00	0.996761625
10/3/2008 20:00	10/4/2008 20:00	0.996802215
10/3/2008 21:00	10/4/2008 21:00	0.996894549
10/3/2008 22:00	10/4/2008 22:00	0.996918367
10/3/2008 23:00	10/4/2008 23:00	0.996925297
10/4/2008 0:00	10/5/2008 0:00	0.996822969
10/4/2008 1:00	10/5/2008 1:00	0.996883849
10/4/2008 2:00	10/5/2008 2:00	0.996802908
10/4/2008 3:00	10/5/2008 3:00	0.99671985
10/4/2008 4:00	10/5/2008 4:00	0.996779803
10/4/2008 5:00	10/5/2008 5:00	0.996760691
10/4/2008 6:00	10/5/2008 6:00	0.996673057
10/4/2008 7:00	10/5/2008 7:00	0.996645381
10/4/2008 8:00	10/5/2008 8:00	0.99670544
10/4/2008 9:00	10/5/2008 9:00	0.996732186
10/4/2008 10:00	10/5/2008 10:00	0.996707227
10/4/2008 11:00	10/5/2008 11:00	0.996692906
10/4/2008 12:00	10/5/2008 12:00	0.996709663
10/4/2008 13:00	10/5/2008 13:00	0.996807978
10/4/2008 14:00	10/5/2008 14:00	0.996764143
10/4/2008 15:00	10/5/2008 15:00	0.99675876
10/4/2008 16:00	10/5/2008 16:00	0.996784021
10/4/2008 17:00	10/5/2008 17:00	0.996773865
10/4/2008 18:00	10/5/2008 18:00	0.996704067
10/4/2008 19:00	10/5/2008 19:00	0.996736217
10/4/2008 20:00	10/5/2008 20:00	0.996735743
10/4/2008 21:00	10/5/2008 21:00	0.996676704
10/4/2008 22:00	10/5/2008 22:00	0.996678623
10/4/2008 23:00	10/5/2008 23:00	0.996699128
10/5/2008 0:00	10/6/2008 0:00	0.99673569

Max	**0.996928**
Min	**0.996262**
Range	**0.000666**
Median	**0.996736**
Average	**0.996700**
StDev	**0.000167**
Count	**97**

Low Time Limit	Upper Time Limit	Avg Hdr CF for 21 and 22
10/6/2007 0:00	10/7/2007 0:00	1.006270972
10/6/2007 1:00	10/7/2007 1:00	1.006313913
10/6/2007 2:00	10/7/2007 2:00	1.006336488
10/6/2007 3:00	10/7/2007 3:00	1.006326341
10/6/2007 4:00	10/7/2007 4:00	1.00632005
10/6/2007 5:00	10/7/2007 5:00	1.006287586
10/6/2007 6:00	10/7/2007 6:00	1.006339381
10/6/2007 7:00	10/7/2007 7:00	1.006393859
10/6/2007 8:00	10/7/2007 8:00	1.006408821
10/6/2007 9:00	10/7/2007 9:00	1.006383416
10/6/2007 10:00	10/7/2007 10:00	1.006320588
10/6/2007 11:00	10/7/2007 11:00	1.006243504
10/6/2007 12:00	10/7/2007 12:00	1.006228857
10/6/2007 13:00	10/7/2007 13:00	1.006225867
10/6/2007 14:00	10/7/2007 14:00	1.006166338
10/6/2007 15:00	10/7/2007 15:00	1.006183271
10/6/2007 16:00	10/7/2007 16:00	1.00618634
10/6/2007 17:00	10/7/2007 17:00	1.00622399
10/6/2007 18:00	10/7/2007 18:00	1.006228255
10/6/2007 19:00	10/7/2007 19:00	1.006200721
10/6/2007 20:00	10/7/2007 20:00	1.006180492
10/6/2007 21:00	10/7/2007 21:00	1.006187105
10/6/2007 22:00	10/7/2007 22:00	1.006161345
10/6/2007 23:00	10/7/2007 23:00	1.006128773
10/7/2007 0:00	10/8/2007 0:00	1.00605237
10/7/2007 1:00	10/8/2007 1:00	1.006043028
10/7/2007 2:00	10/8/2007 2:00	1.006020219
10/7/2007 3:00	10/8/2007 3:00	1.006023637
10/7/2007 4:00	10/8/2007 4:00	1.006017265
10/7/2007 5:00	10/8/2007 5:00	1.006044744
10/7/2007 6:00	10/8/2007 6:00	1.005994723
10/7/2007 7:00	10/8/2007 7:00	1.005995271
10/7/2007 8:00	10/8/2007 8:00	1.005968465
10/7/2007 9:00	10/8/2007 9:00	1.005912917
10/7/2007 10:00	10/8/2007 10:00	1.005971793
10/7/2007 11:00	10/8/2007 11:00	1.006034358
10/7/2007 12:00	10/8/2007 12:00	1.006057909
10/7/2007 13:00	10/8/2007 13:00	1.006053359
10/7/2007 14:00	10/8/2007 14:00	1.00611075
10/7/2007 15:00	10/8/2007 15:00	1.006103649
10/7/2007 16:00	10/8/2007 16:00	1.006130041
10/7/2007 17:00	10/8/2007 17:00	1.00614196
10/7/2007 18:00	10/8/2007 18:00	1.006163457
10/7/2007 19:00	10/8/2007 19:00	1.006174906
10/7/2007 20:00	10/8/2007 20:00	1.006206505
10/7/2007 21:00	10/8/2007 21:00	1.006182703
10/7/2007 22:00	10/8/2007 22:00	1.006110032
10/7/2007 23:00	10/8/2007 23:00	1.006119516
10/8/2007 0:00	10/9/2007 0:00	1.006181762
10/8/2007 1:00	10/9/2007 1:00	1.006182276
10/8/2007 2:00	10/9/2007 2:00	1.006208924
10/8/2007 3:00	10/9/2007 3:00	1.006200863
10/8/2007 4:00	10/9/2007 4:00	1.006242859
10/8/2007 5:00	10/9/2007 5:00	1.006224801

Low Time Limit	Upper Time Limit	Avg Hdr CF for 21 and 22
10/8/2007 6:00	10/9/2007 6:00	1.006228492
10/8/2007 7:00	10/9/2007 7:00	1.006245639
10/8/2007 8:00	10/9/2007 8:00	1.006231112
10/8/2007 9:00	10/9/2007 9:00	1.006338557
10/8/2007 10:00	10/9/2007 10:00	1.006284126
10/8/2007 11:00	10/9/2007 11:00	1.006300712
10/8/2007 12:00	10/9/2007 12:00	1.006282161
10/8/2007 13:00	10/9/2007 13:00	1.006303732
10/8/2007 14:00	10/9/2007 14:00	1.006297707
10/8/2007 15:00	10/9/2007 15:00	1.006298831
10/8/2007 16:00	10/9/2007 16:00	1.006228955
10/8/2007 17:00	10/9/2007 17:00	1.006205568
10/8/2007 18:00	10/9/2007 18:00	1.006206183
10/8/2007 19:00	10/9/2007 19:00	1.006221337
10/8/2007 20:00	10/9/2007 20:00	1.006254076
10/8/2007 21:00	10/9/2007 21:00	1.006235149
10/8/2007 22:00	10/9/2007 22:00	1.006282632
10/8/2007 23:00	10/9/2007 23:00	1.006291277
10/9/2007 0:00	10/10/2007 0:00	1.006335298
10/9/2007 1:00	10/10/2007 1:00	1.006392334
10/9/2007 2:00	10/10/2007 2:00	1.006359711
10/9/2007 3:00	10/10/2007 3:00	1.006386855
10/9/2007 4:00	10/10/2007 4:00	1.006351799
10/9/2007 5:00	10/10/2007 5:00	1.0063645
10/9/2007 6:00	10/10/2007 6:00	1.006368207
10/9/2007 7:00	10/10/2007 7:00	1.006302834
10/9/2007 8:00	10/10/2007 8:00	1.006301495
10/9/2007 9:00	10/10/2007 9:00	1.00627008
10/9/2007 10:00	10/10/2007 10:00	1.006333641
10/9/2007 11:00	10/10/2007 11:00	1.006281047
10/9/2007 12:00	10/10/2007 12:00	1.006251787
10/9/2007 13:00	10/10/2007 13:00	1.00628069
10/9/2007 14:00	10/10/2007 14:00	1.006321318
10/9/2007 15:00	10/10/2007 15:00	1.006339056
10/9/2007 16:00	10/10/2007 16:00	1.006404094
10/9/2007 17:00	10/10/2007 17:00	1.006412896
10/9/2007 18:00	10/10/2007 18:00	1.006417618
10/9/2007 19:00	10/10/2007 19:00	1.006395649
10/9/2007 20:00	10/10/2007 20:00	1.006386022
10/9/2007 21:00	10/10/2007 21:00	1.006434176
10/9/2007 22:00	10/10/2007 22:00	1.006447193
10/9/2007 23:00	10/10/2007 23:00	1.006409133
10/10/2007 0:00	10/11/2007 0:00	1.006377708

Max	**1.006447**
Min	**1.005913**
Range	**0.000534**
Median	**1.006243**
Average	**1.006235**
StDev	**0.000123**
Count	**97**

Low Time Limit	Upper Time Limit	Avg Hdr CF for 21 and 22
10/15/2008 0:00	10/16/2008 0:00	1.006508105
10/15/2008 1:00	10/16/2008 1:00	1.006504779
10/15/2008 2:00	10/16/2008 2:00	1.006539949
10/15/2008 3:00	10/16/2008 3:00	1.006517801
10/15/2008 4:00	10/16/2008 4:00	1.006547614
10/15/2008 5:00	10/16/2008 5:00	1.006574594
10/15/2008 6:00	10/16/2008 6:00	1.006547419
10/15/2008 7:00	10/16/2008 7:00	1.00655459
10/15/2008 8:00	10/16/2008 8:00	1.006556482
10/15/2008 9:00	10/16/2008 9:00	1.006533813
10/15/2008 10:00	10/16/2008 10:00	1.006484528
10/15/2008 11:00	10/16/2008 11:00	1.006417907
10/15/2008 12:00	10/16/2008 12:00	1.006459677
10/15/2008 13:00	10/16/2008 13:00	1.006451863
10/15/2008 14:00	10/16/2008 14:00	1.006401329
10/15/2008 15:00	10/16/2008 15:00	1.006319145
10/15/2008 16:00	10/16/2008 16:00	1.006357509
10/15/2008 17:00	10/16/2008 17:00	1.006405937
10/15/2008 18:00	10/16/2008 18:00	1.006451318
10/15/2008 19:00	10/16/2008 19:00	1.006472903
10/15/2008 20:00	10/16/2008 20:00	1.00644371
10/15/2008 21:00	10/16/2008 21:00	1.006450543
10/15/2008 22:00	10/16/2008 22:00	1.006435645
10/15/2008 23:00	10/16/2008 23:00	1.006449958
10/16/2008 0:00	10/17/2008 0:00	1.006388929
10/16/2008 1:00	10/17/2008 1:00	1.006388228
10/16/2008 2:00	10/17/2008 2:00	1.006357861
10/16/2008 3:00	10/17/2008 3:00	1.006407879
10/16/2008 4:00	10/17/2008 4:00	1.006385941
10/16/2008 5:00	10/17/2008 5:00	1.006395759
10/16/2008 6:00	10/17/2008 6:00	1.006424503
10/16/2008 7:00	10/17/2008 7:00	1.006421823
10/16/2008 8:00	10/17/2008 8:00	1.00641125
10/16/2008 9:00	10/17/2008 9:00	1.006423232
10/16/2008 10:00	10/17/2008 10:00	1.006465062
10/16/2008 11:00	10/17/2008 11:00	1.006495306
10/16/2008 12:00	10/17/2008 12:00	1.006563761
10/16/2008 13:00	10/17/2008 13:00	1.00653644
10/16/2008 14:00	10/17/2008 14:00	1.006575177
10/16/2008 15:00	10/17/2008 15:00	1.00656765
10/16/2008 16:00	10/17/2008 16:00	1.006569718
10/16/2008 17:00	10/17/2008 17:00	1.006588087
10/16/2008 18:00	10/17/2008 18:00	1.006543371
10/16/2008 19:00	10/17/2008 19:00	1.006561736
10/16/2008 20:00	10/17/2008 20:00	1.00656588
10/16/2008 21:00	10/17/2008 21:00	1.006538097
10/16/2008 22:00	10/17/2008 22:00	1.006508928
10/16/2008 23:00	10/17/2008 23:00	1.006481445
10/17/2008 0:00	10/18/2008 0:00	1.006524373
10/17/2008 1:00	10/18/2008 1:00	1.006517406
10/17/2008 2:00	10/18/2008 2:00	1.006525716
10/17/2008 3:00	10/18/2008 3:00	1.006468283
10/17/2008 4:00	10/18/2008 4:00	1.006442177
10/17/2008 5:00	10/18/2008 5:00	1.006407348

Low Time Limit	Upper Time Limit	Avg Hdr CF for 21 and 22
10/17/2008 6:00	10/18/2008 6:00	1.006401637
10/17/2008 7:00	10/18/2008 7:00	1.006369569
10/17/2008 8:00	10/18/2008 8:00	1.006366241
10/17/2008 9:00	10/18/2008 9:00	1.006409574
10/17/2008 10:00	10/18/2008 10:00	1.006397573
10/17/2008 11:00	10/18/2008 11:00	1.006412176
10/17/2008 12:00	10/18/2008 12:00	1.006329664
10/17/2008 13:00	10/18/2008 13:00	1.006387503
10/17/2008 14:00	10/18/2008 14:00	1.006349952
10/17/2008 15:00	10/18/2008 15:00	1.006419814
10/17/2008 16:00	10/18/2008 16:00	1.00638348
10/17/2008 17:00	10/18/2008 17:00	1.006347148
10/17/2008 18:00	10/18/2008 18:00	1.006380524
10/17/2008 19:00	10/18/2008 19:00	1.006377072
10/17/2008 20:00	10/18/2008 20:00	1.006395707
10/17/2008 21:00	10/18/2008 21:00	1.006384033
10/17/2008 22:00	10/18/2008 22:00	1.006391693
10/17/2008 23:00	10/18/2008 23:00	1.006409639
10/18/2008 0:00	10/19/2008 0:00	1.006455061
10/18/2008 1:00	10/19/2008 1:00	1.006549813
10/18/2008 2:00	10/19/2008 2:00	1.006553575
10/18/2008 3:00	10/19/2008 3:00	1.006588474
10/18/2008 4:00	10/19/2008 4:00	1.006587158
10/18/2008 5:00	10/19/2008 5:00	1.006591028
10/18/2008 6:00	10/19/2008 6:00	1.006591966
10/18/2008 7:00	10/19/2008 7:00	1.006589265
10/18/2008 8:00	10/19/2008 8:00	1.006583146
10/18/2008 9:00	10/19/2008 9:00	1.006557819
10/18/2008 10:00	10/19/2008 10:00	1.006642425
10/18/2008 11:00	10/19/2008 11:00	1.006641606
10/18/2008 12:00	10/19/2008 12:00	1.006673885
10/18/2008 13:00	10/19/2008 13:00	1.006660037
10/18/2008 14:00	10/19/2008 14:00	1.006711438
10/18/2008 15:00	10/19/2008 15:00	1.006678426
10/18/2008 16:00	10/19/2008 16:00	1.006676936
10/18/2008 17:00	10/19/2008 17:00	1.006666482
10/18/2008 18:00	10/19/2008 18:00	1.006671745
10/18/2008 19:00	10/19/2008 19:00	1.006640011
10/18/2008 20:00	10/19/2008 20:00	1.006685387
10/18/2008 21:00	10/19/2008 21:00	1.006681623
10/18/2008 22:00	10/19/2008 22:00	1.006652928
10/18/2008 23:00	10/19/2008 23:00	1.00661723
10/19/2008 0:00	10/20/2008 0:00	1.00658596

Max	**1.006711**
Min	**1.006319**
Range	**0.000392**
Median	**1.006495**
Average	**1.006498**
StDev	**0.000101**
Count	**97**

Unit 1, 2007		*Unit 2, 2007*	
	Avg Hdr CF for 11 and 12		Avg Hdr CF for 21 and 22
Max	0.997751	Max	1.006447
Min	0.997022	Min	1.005913
Range	0.000729	Range	0.000534
Median	0.997299	Median	1.006243
Average	0.997308	Average	1.006235
StDev	0.000191	StDev	0.000123
Count	97	Count	97
Unit 1, 2008		*Unit 2, 2008*	
	Avg Hdr CF for 11 and 12		Avg Hdr CF for 21 and 22
Max	0.996928	Max	1.006711
Min	0.996262	Min	1.006319
Range	0.000666	Range	0.000392
Median	0.996736	Median	1.006495
Average	0.996700	Average	1.006498
StDev	0.000167	StDev	0.000101
Count	97	Count	97