FENOC

FirstEnergy Nuclear Operating Company

5501 North State Route 2
Oak Harbor, Ohio 43449

Mark B. Bezilla
Vice President - Nuclear

419-321-7676
Fax: 419-321-7582

March 12, 2008
L-08-094

10 CFR 50.90

ATTN: Document Control Desk
United States Nuclear Regulatory Commission
Washington, D. C. 20555-0001

SUBJECT:
Davis-Besse Nuclear Power Station, Unit 1
Docket No. 50-346, License No. NPF-3
Response to Request for Additional Information Regarding Measurement Uncertainty Recapture Power Uprate Amendment Application (TAC No. MD5240)

By letter dated April 12, 2007, the FirstEnergy Nuclear Operating Company (FENOC) submitted an application for license amendment to revise the Technical Specifications for Davis-Besse Nuclear Power Station (DBNPS), Unit No. 1, to accommodate an increase in the Rated Thermal Power from 2772 megawatts thermal (MWt) to 2817 MWt. By letter dated November 19, 2007, the Nuclear Regulatory Commission (NRC) requested additional information necessary to complete the amendment application review. The attachment provides responses to the staff's questions contained in the information request as modified during teleconferences between FENOC and NRC staff on December 11, 2007 and March 4, 2008.

There are no regulatory commitments contained in this letter. If there are any questions or if additional information is required, please contact Mr. Thomas A. Lentz, Manager – Fleet Licensing, at (330) 761-6071.

I declare under penalty of perjury that the foregoing is true and correct. Executed on March 12, 2008.

Sincerely,

Mark B. Bezilla

A001
NRR

Attachment:
Response to Request for Additional Information Regarding Measurement Uncertainty Recapture Power Uprate Amendment Application

cc: NRC Region III Administrator
NRC Resident Inspector
NRR Project Manager
Utility Radiological Safety Board
Executive Director, Ohio Emergency Management Agency,
State of Ohio (NRC Liaison)

To complete their review, the NRC staff has requested additional information regarding the license amendment application for the measurement uncertainty recapture power uprate. FENOC's response for Davis-Besse Nuclear Power Station (DBNPS) to this request is provided below.

1. **Provide representative flow profiles from plant operation that can be compared to the Alden Research Laboratory (ARL) test results provided in ER-227 Rev. 1 and the reasons for and implications of differences, if any.**

DBNPS Response:

Engineering Report (ER)-227 Rev. 1 notes that Serial Number 6765 was installed in Loop A at the plant and Serial Number 6764 was installed in Loop B at the plant. Figure 1 and Figure 2 display the measured velocity profile flatness ratio for Serial Number 6764 and 6765, respectively. The graph also displays the ARL span of calibration for flatness ratios for each pipe as summarized in Table 1. The calibration profile flatness ratio span for Serial Number 6764 at ARL as reported in ER-227, "Profile Factor Calculation and Accuracy Assessment for the Davis Besse Unit 1 LEFM √+ Spool Pieces," Rev. 1, was 0.8528 to 0.8819. The span of calibration profile flatness ratios (FR) for Serial Number 6765 at ARL as reported in ER-227 Rev. 1 was 0.8586 to 0.8929. During the period of time from 4/3/07 to 12/26/07, the operating span of flatness ratio for Serial Number 6764 at the plant was 0.8670 to 0.8919. The span of operating profile flatness ratio for Serial Number 6765 at the plant was 0.8818 to 0.8997. The data is summarized in Table 1.

Serial Number	ARL FR Calibration Span	Plant FR Operating Span
6764	0.8528 to 0.8819 (3.4% Span)	0.8670 to 0.8919 (2.9% Span)
6765	0.8586 to 0.8929 (4.0% Span)	0.8818 to 0.8997 (2.0% Span)

Table 1: ARL Calibration Profile Flatness Span vs. Plant Operation Flatness Span, from 4/3/07 through 12/26/07

The plant profiles in Figures 1 and 2 overlap the ARL calibration profiles, and the span of plant profiles are within the span of the tested ARL calibration profiles.

As discussed in ER-80P, "Improving Thermal Power Accuracy and Plant Safety While Increasing Operating Power Level Using the LEFM $\sqrt{}^{TM}$ System," a velocity profile upward shift is an expected response once the meters are moved from the test laboratory and installed within the plant. In the test laboratory, the profile factor is determined to ensure that the meter's accuracy is maintained by correcting the actual plant flow velocities. The profile factor correction of the actual plant flow velocities operating span is within the calibration span of the ARL results. Therefore, there is confidence that the ARL calibration results apply to plant conditions.

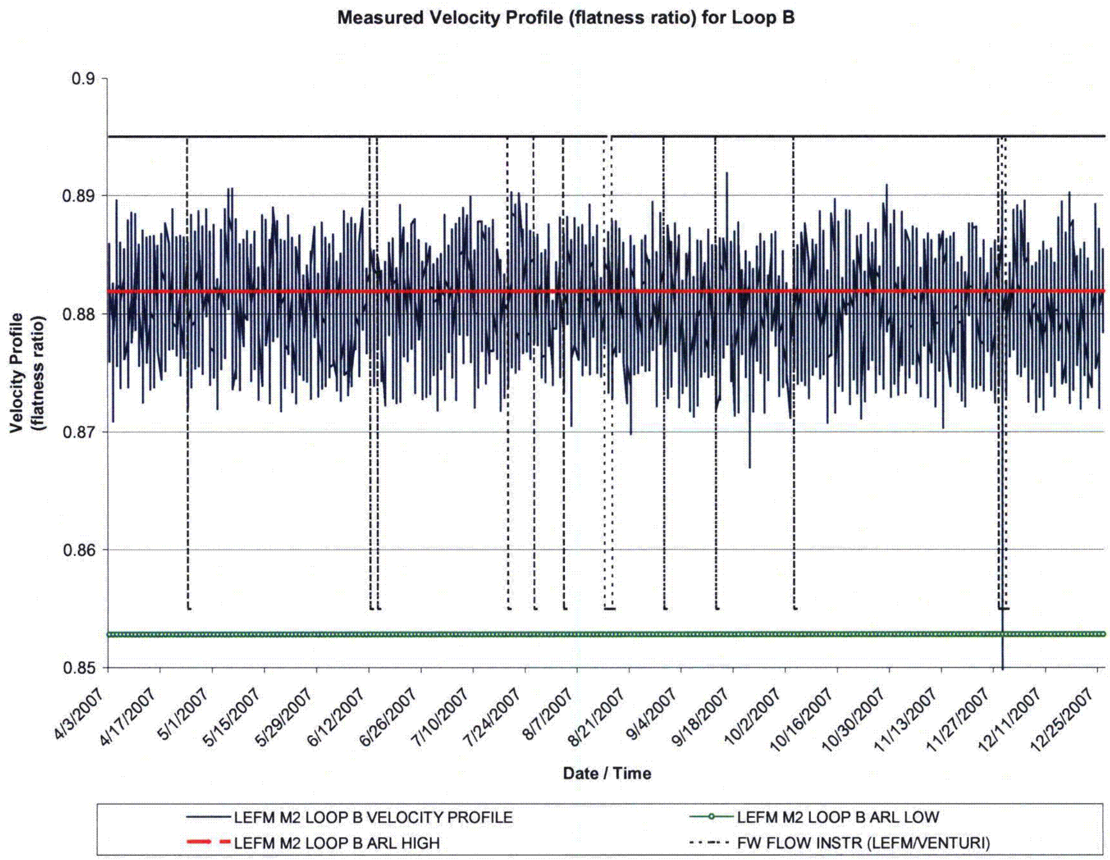

Figure 1 – Measured Velocity Profile for Serial Number 6764 Plant Loop B, from 4/3/07 through 12/26/07. The leading edge flow meter (LEFM) was placed in service on 4/3/07 and used as Heat Balance Input.

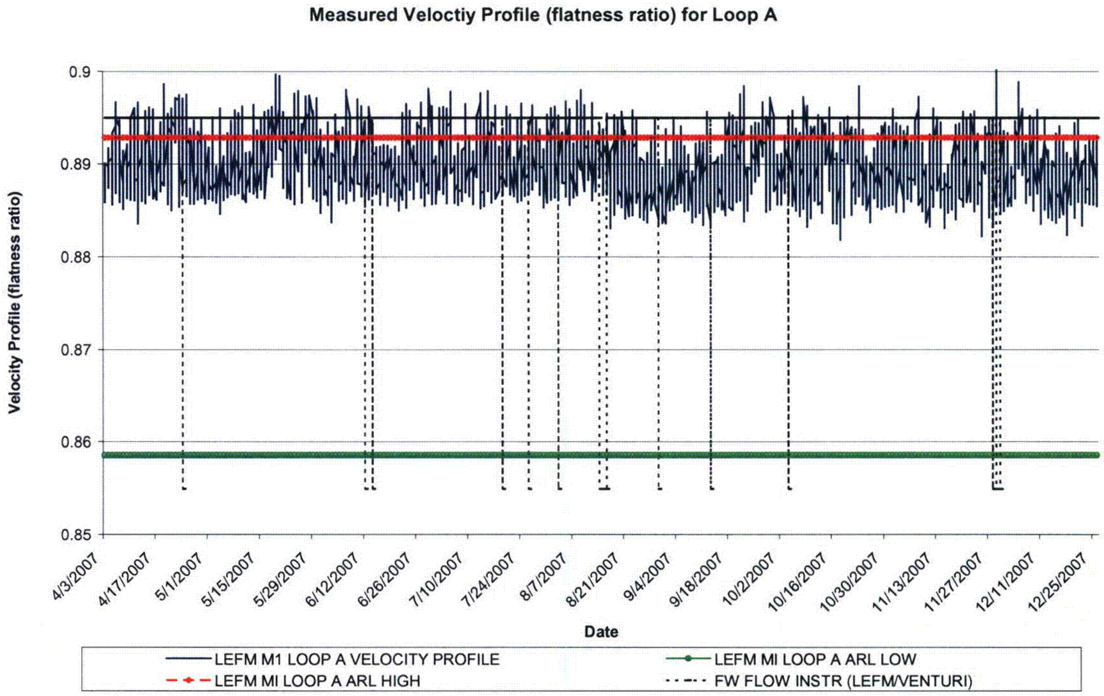

Figure 2 – Measured Velocity Profile for Serial Number 6765, Plant Loop A, from 4/3/07 through 12/26/07. The LEFM was placed in service on 4/3/07 and used as Heat Balance Input.

In Figure 1 and Figure 2, transducer replacements and other instances of transducer maintenance are denoted by vertical lines in the graphs. Historical transducer replacements are listed in Table 2. The response to Question 6 contains additional information relevant to transducer replacement periods.

Some changes in measured flatness ratio could be attributed to transducer replacements, but the changes in measured flatness ratio do not always occur after transducer replacement. The changes in the flatness ratio are small in any event, and are consistent with ER-551 Rev. 1, "LEFM √+ Transducer Installation Sensitivity," which reports the uncertainty associated with transducer replacement. In effect, the changes are within the observational uncertainty of the measurements.

Figure 1 and Figure 2 sample point data was retrieved from the plant computer and averaged hourly.

	Loop A transducers replaced	Loop B transducers replaced
4/2/2007	All - 200B872G04 Rev L	All - 200B872G04 Rev L
4/24/2007		P3
7/19/2007		P1, P4, P7
8/3/2007	P3, P6	
8/14/2007	P2, P5, P8	P6
9/13/2007	P1	P5
11/29/2007		All - 202B550G01

Table 2: Transducer replacement history

2. Regarding the Attachment 1, Page 16, figure provided in the September 18, 2007, supplement:

a. Define the terms in the figure

DBNPS Response:

Attachment 1, Page 16, figure provided in the September 18, 2007, supplement describes the velocity profile over time. The axial profile is characterized by its flatness, measured by the ratio of the sum of the measured (short) chord velocities to the sum of the inside (long) chord velocities. Velocity profile (or flatness ratio) can be calculated from the normalized path velocities from the leading edge flow meter (LEFM) data output. For a LEFM CheckPlus, velocity profile (or flatness ratio, FR):

FR = (V1+V4+V5+V8) / (V2+V3+V6+V7), whereas
FR = flatness ratio, and
Vx = normalized velocity for path x

The results are identified on the Y axis of the chart, described as "Magnitude." This can be trended over time and correlated with changes in plant water chemistry and feedwater system operating configuration to better define the full range of profiles seen by the meters.

The High Limits and Low Limits for Meter 1 and Meter 2 were established by the LEFM system engineer as part of the System Trending and Monitoring Plan based on benchmark velocities and calculating a velocity profile with +/- 2.5% limits. The purpose of the System Trending limit is to alert the system engineer to investigate velocity profile changes prior to a potential unbounded departure from calibration conditions. The data was manually collected from the LEFM system and inserted into the System Trending and Monitoring Plan spreadsheet for analysis.

b. Describe the relationship between the information and the measured flow rate

DBNPS Response:

Figure 3 and Figure 4 show that the flatness ratio is not correlated to measured flow rate at any discernable level. This is to be expected. As discussed in ER-262, "Effects of Velocity Profile Changes Measured In-Plant on Feedwater Flow Measurement Systems," a real change in flatness ratio would result in a real calibration shift of only -0.0167% x flatness ratio + 1.0167. The measured flatness ratio operating span for Loop A is 0.8885 to 0.8959 and for Loop B is 0.8787 to 0.8864 during the time period of 2/15/05 through 5/18/06. Since the measured flatness ratios shifted, the expected shift in calibration would be approximately -0.01% for Loop A and Loop B, which is beyond the ability of the measurements to discern and is overwhelmed by real fluctuations in flow rate that are commonplace in feedwater systems.

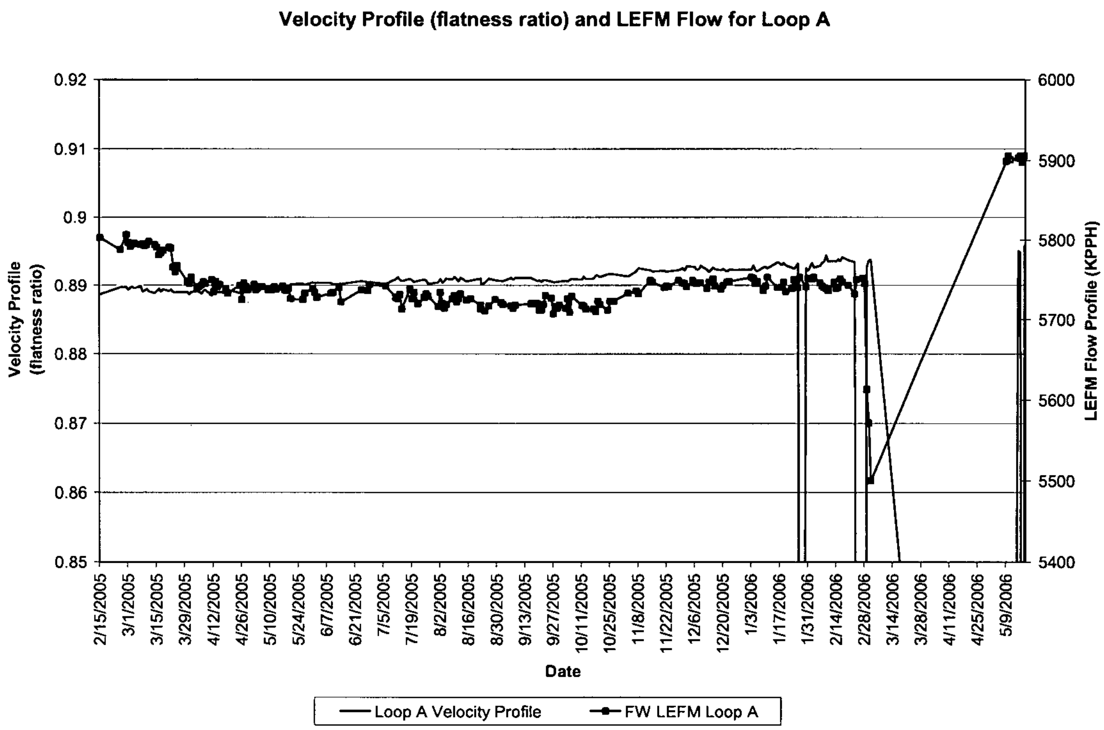

Figure 3 – Measured Velocity Profile and LEFM Flow for Loop A, from 2/15/05 through 5/18/06.

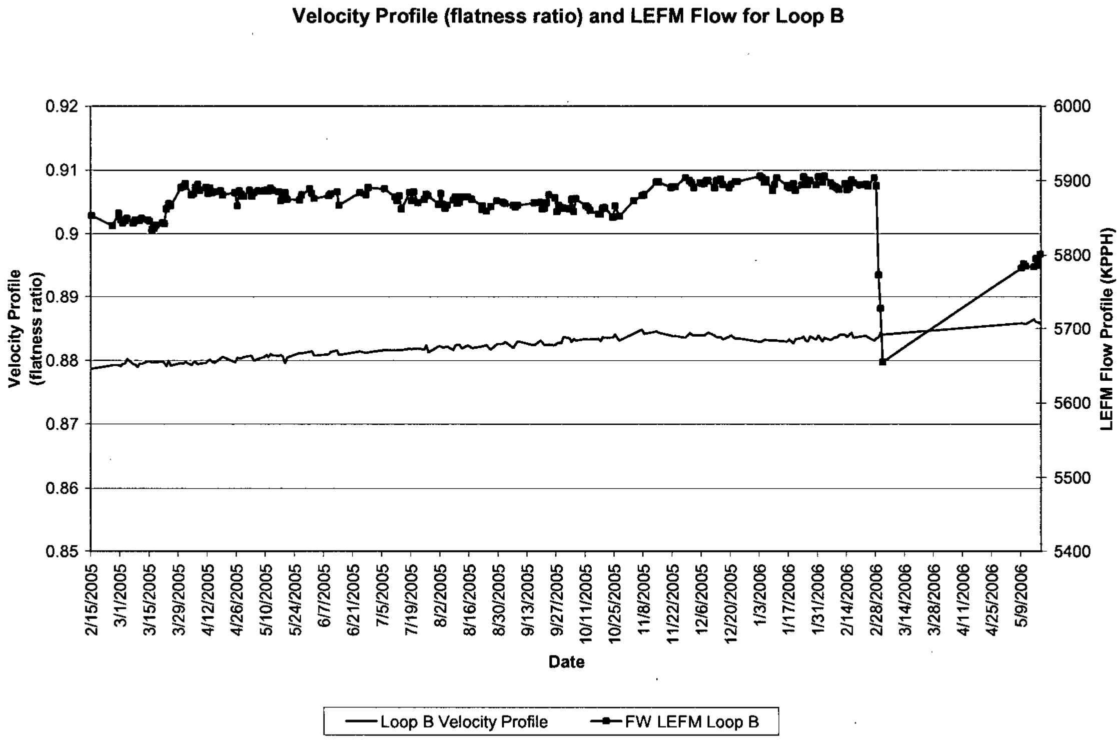

Figure 4 – Measured Velocity Profile and LEFM Flow for Loop B, from 2/15/05 through 5/18/06.

c. **Provide a comparison of the Page 16 information with Table 3 on Page 9 of ER-227 Rev. 1.**

DBNPS Response:

As noted in the response to RAI Question 1, the minimum and maximum of the measured velocity profiles in the plant correspond closely with the calibration span developed by the testing at ARL.

Figure 5 and Figure 6 display the measured velocity profile flatness ratio for Serial Number 6764 and 6765, respectively, during the time span referenced in the figure located in Attachment 1 on Page 16 of the September 18, 2007 correspondence. Also shown on the graph and listed in Table 3 is the ARL span of calibration for flatness ratios for each pipe. The span of calibration profile flatness ratio for Serial Number 6764 at ARL that was reported in ER-227 Rev. 1 was 0.8528 to 0.8819. The span of calibration profile flatness ratios for Serial Number 6765 at ARL as reported in ER-227 Rev. 1 was 0.8586 to 0.8929. Also noted in ER-227 Rev. 1, Serial Number 6765 was installed in Loop A and the Serial Number 6764 was installed in Loop B. During the period of time from 2/15/05 to 5/18/06, the operating span of flatness ratio for Serial Number 6764 at the plant was 0.8787 to 0.8864. The operating span of flatness ratio for Serial Number 6765 at the plant was 0.8885 to 0.8959. The data is summarized in Table 3.

Serial Number	ARL FR Calibration Span	Plant FR Operating Span
6764	0.8528 to 0.8819 (3.4% Span)	0.8787 to 0.8864 (0.88% Span)
6765	0.8586 to 0.8929 (4.0% Span)	0.8885 to 0.8959 (0.83% Span)

Table 3: ARL Calibration Profile Flatness Span vs. Plant Operation Flatness Span, From February 15, 2005 through May 18, 2006

The profiles in Figures 5 and 6 for the plant overlap with the profiles of the ARL calibration, and the span of profiles in the plant are within the span of profiles tested in the ARL calibration.

The data displayed in the figures show that prior to the changeout of the transducers in May 2006, the performance is comparable to the test data listed in Table 3 of ER-227. Therefore, there is confidence that the ARL calibration results apply to plant conditions.

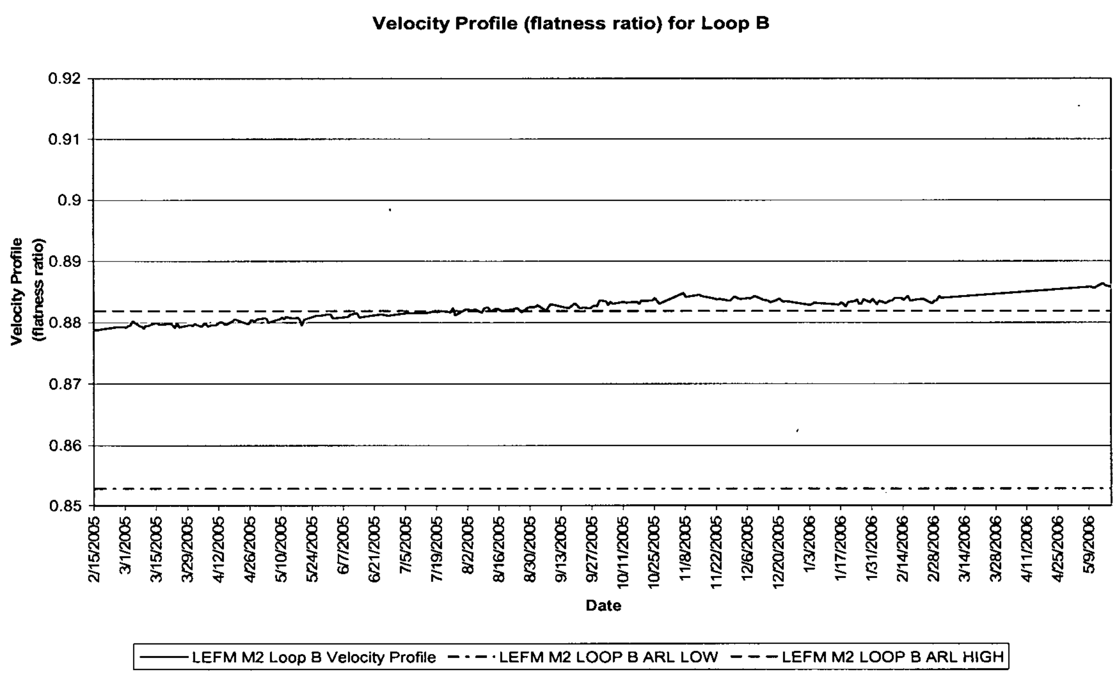

Figure 5 – Measured Velocity Profile for Serial Number 6764, Plant Loop B, from 2/15/05 through 5/18/06.

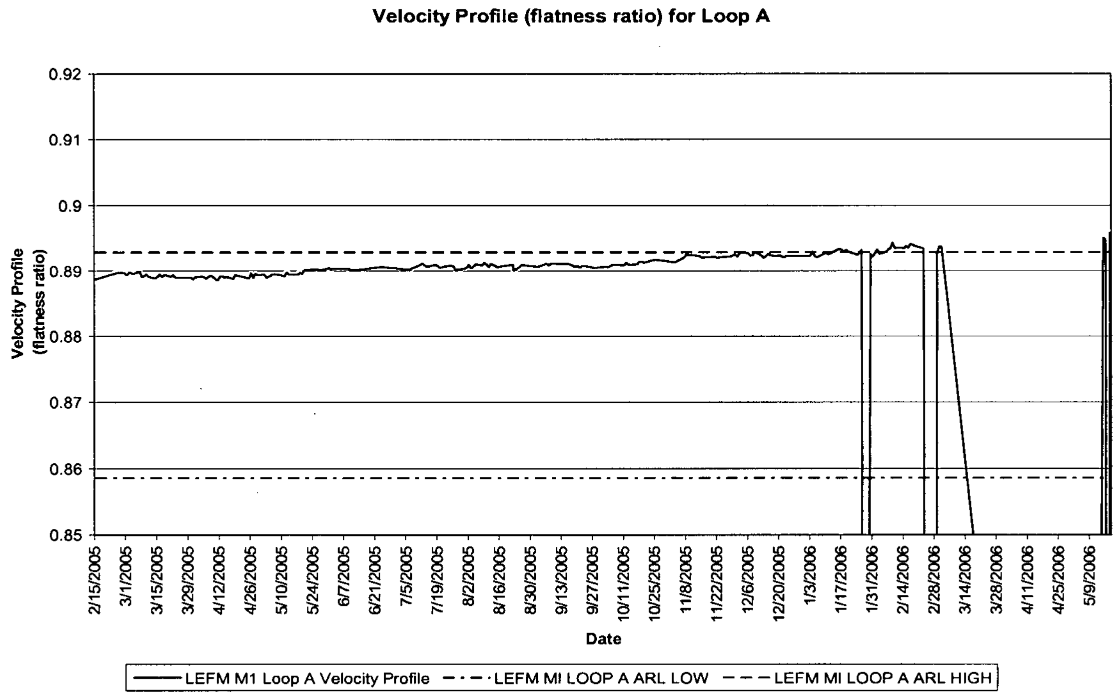

Figure 6 – Measured Velocity Profile for Serial Number 6765, Plant Loop A, from 2/15/05 through 5/18/06.

Figure 5 and Figure 6 sample point data was manually retrieved from the LEFM computer at a rate of approximately 4 times per week.

d. Coverage of Page 16 information versus operating history including from time of initial operation and after transducer replacement

DBNPS Response:

Although the LEFM was installed earlier, it was not placed into service as the heat balance input until April 3, 2007. Since being placed into service, the transducers were replaced on multiple occasions. Some changes in measured flatness ratio could be attributed to transducer replacements, but the changes in measured flatness ratio do not always occur after transducer replacement. The changes in flatness are small in any event, and are consistent with ER-551 Rev. 1, “LEFM CheckPlus Transducer Installation Sensitivity,” which reports the uncertainty associated with transducer replacement. In effect, the changes are within the observational uncertainty of the measurements and consistent within the uncertainty analysis allowances.

Figure 7 and Figure 8 display the velocity profiles before and after transducer replacement for LEFM Loop A and LEFM Loop B in May 2006. The replacement of the LEFM transducers resulted in a minimal change in flatness ratio for LEFM Loop A and LEFM Loop B. The Loop A approximate average velocity profiles before and after transducer changeout were 0.8933 and 0.8875, respectively. The Loop B approximate average velocity profile before and after Loop B transducer changeout were 0.8836 and 0.8795, respectively. As discussed in ER-262, "Effects of Velocity Profile Changes Measured In-Plant on Feedwater Flow Measurement Systems," a real change in flatness ratio would result in a real calibration shift of only -0.0167% x flatness ratio + 1.0167. Since the measured flatness ratio shifted, the expected shifts in meter calibration would be +0.01% for Loop A and Loop B. These shifts are not discernable measurements and are overwhelmed by normal feedwater system fluctuations. The minor shift in flatness ratio from pre-maintenance levels in both meters can not be determined with certainty that it was caused by the LEFM transducer replacements or by other combined effects external to the LEFM. The measured velocity profile, as displayed in Figure 7 and Figure 8, overlaps with the profile as determined by the ARL calibration. The span of the velocity profile for the meter installed in the plant is within the span of profile tested in the ARL calibration, before and after the transducer changeout. Therefore, there is confidence that the accuracy of the LEFM is not compromised by a replacement of the transducers.

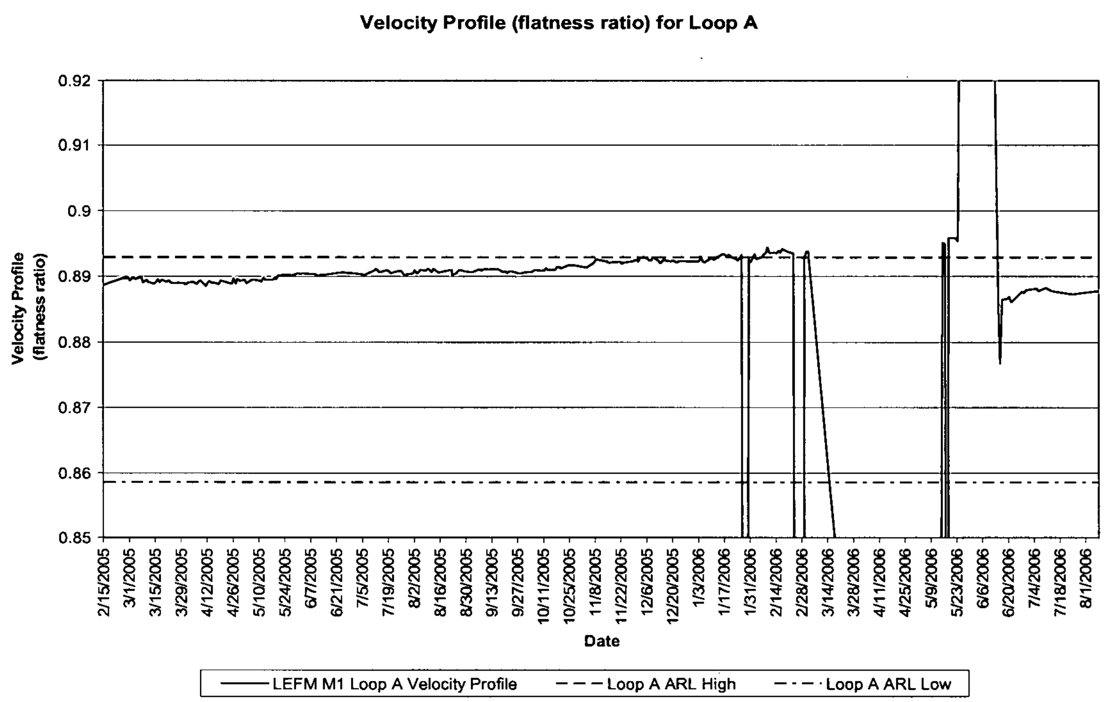

Figure 7 – Measured Velocity Profile for Loop A before and after transducer replacement (May 2006)

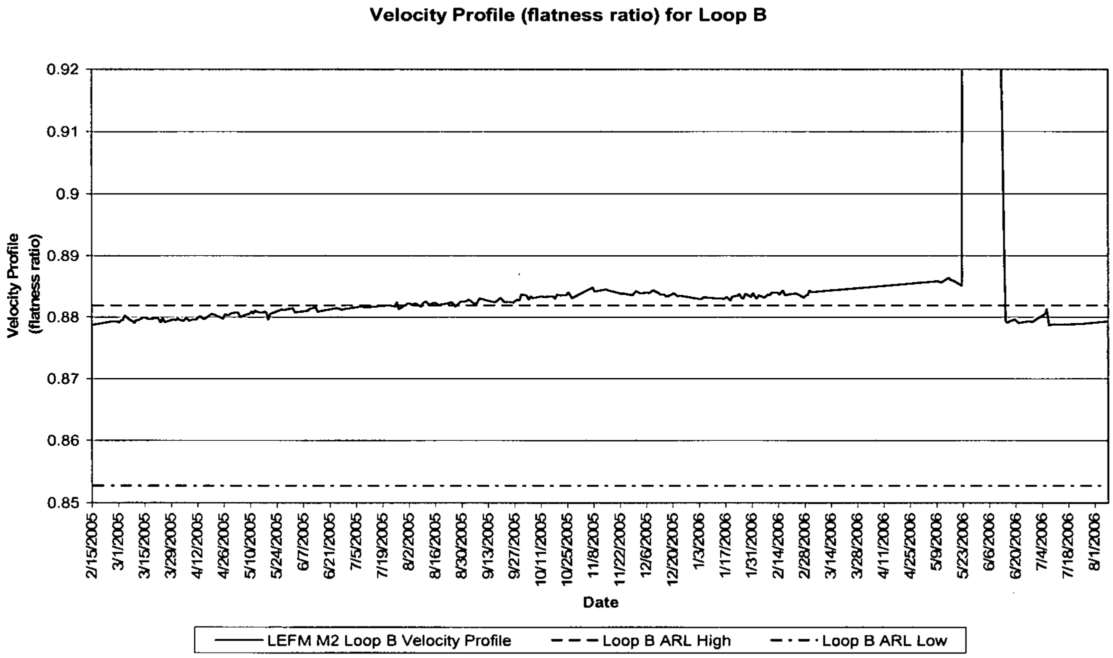

Figure 8 – Measured Velocity Profile for Loop B before and after transducer replacement (May 2006)

Figure 7 and Figure 8 sample point data was manually retrieved from the LEFM computer at a rate of approximately four times per week.

e. Provide reason for correspondence between the "ups and downs" in the Page 16 plots for the two pipes

DBNPS Response:

The apparent correlation between the measured flatness ratios in Loop A and Loop B in Figure 9 suggests changing feedwater profiles in response to plant power or regulation valve positions. However, it is not unreasonable to expect that changes in pipe wall roughness would be similar between the pipes since chemistry and iron transport conditions would be the same in each pipe. Different pipes in the same feedwater systems have exhibited both correlated and uncorrelated behavior in the past, as noted in ER-262 Rev. 0, "Effects of Velocity Profile Changes Measured In-Plant on Feedwater Flow Measurement Systems." Therefore, in this time period and in this instance, the flatness ratios are correlated and the result of systematically related changes. However, because the changes are small and within the limits of the ARL, which bounds the allowances, the uncertainty analyses remain acceptable.

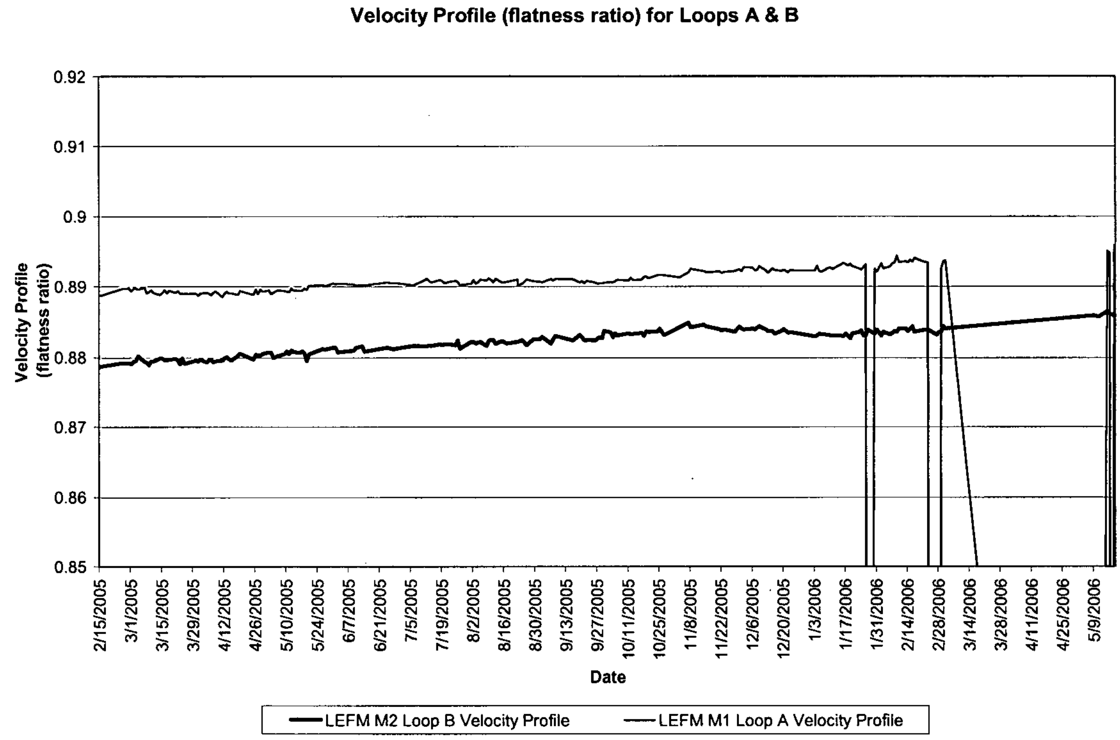

Figure 9 –Velocity Profile for Loop A and Loop B, from 2/15/05 through 5/18/06.

3. Provide flow profile information before and after transducer replacement.

DBNPS Response:

Since the LEFM was placed into service as the heat balance input on April 3, 2007, the transducers were replaced on multiple occasions. It is possible that some changes in measured flatness ratio could be attributed to transducer replacements, but changes in measured flatness ratio do not always occur after transducer replacement. The changes in flatness are small in any event, and are consistent with ER-551 Rev. 1, "LEFM CheckPlus Transducer Installation Sensitivity," which reports the uncertainty associated with transducer replacement. In effect, the changes are within the observational uncertainty of the measurements and consistent with the allowances within the uncertainty analysis.

Figure 10 and Figure 11 display the measured velocity profile before and after transducer replacement on LEFM Loop B in November, 2007. The replacement of the LEFM Loop B transducers resulted in minimal change in flatness ratio. The Loop B approximate average velocity profile before and after transducer replacement was 0.8791 and 0.8805, respectively. Loop A approximate average velocity profile before and after Loop B transducer replacement was 0.8896 and 0.8895, respectively. As discussed in ER-262, "Effects of Velocity Profile Changes Measured In-Plant on Feedwater Flow Measurement Systems," a real change in flatness ratio would result in a real calibration shift of only -0.0167% x flatness ratio + 1.0167. Since the measured flatness ratios shifted, the expected shift in calibration would be approximately -0.01% for Loop B with a very negligible shift in Loop A. These shifts are not discernable measurements and are overwhelmed by normal feedwater system fluctuations. The slight shift in flatness ratio from pre-maintenance levels in Loop B can not be attributed with certainty to the LEFM Loop B transducer replacements or by other combined effects external to the LEFM. The measured velocity profile, as displayed in Figure 10 and Figure 11, overlaps with the profile as determined by the ARL calibration. The span of the velocity profile for the meter installed in the plant is within the span of profile tested in the ARL calibration, before and after the transducer replacement. Therefore, there is confidence that the accuracy of the LEFM is not compromised by a replacement of the transducers.

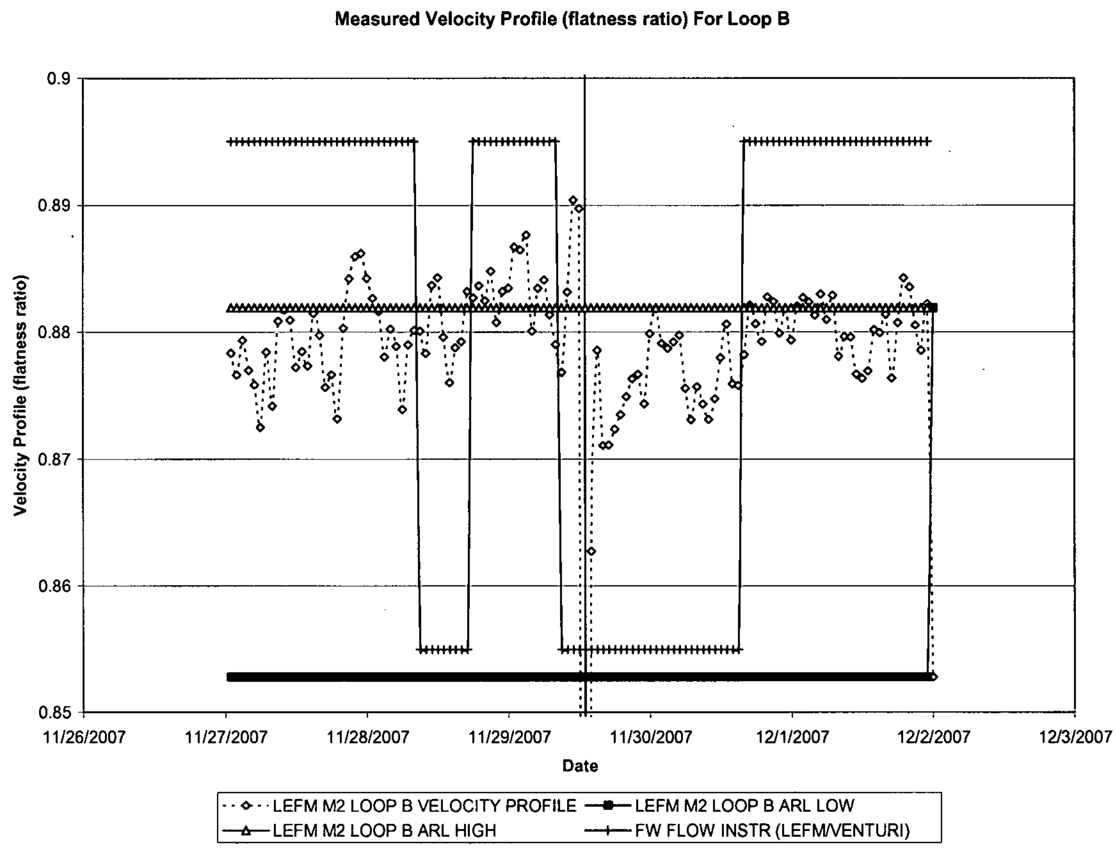

Figure 10 – Measured Velocity Profile for Loop B before and after Loop B transducer replacement (11/27/07 through 12/1/07)

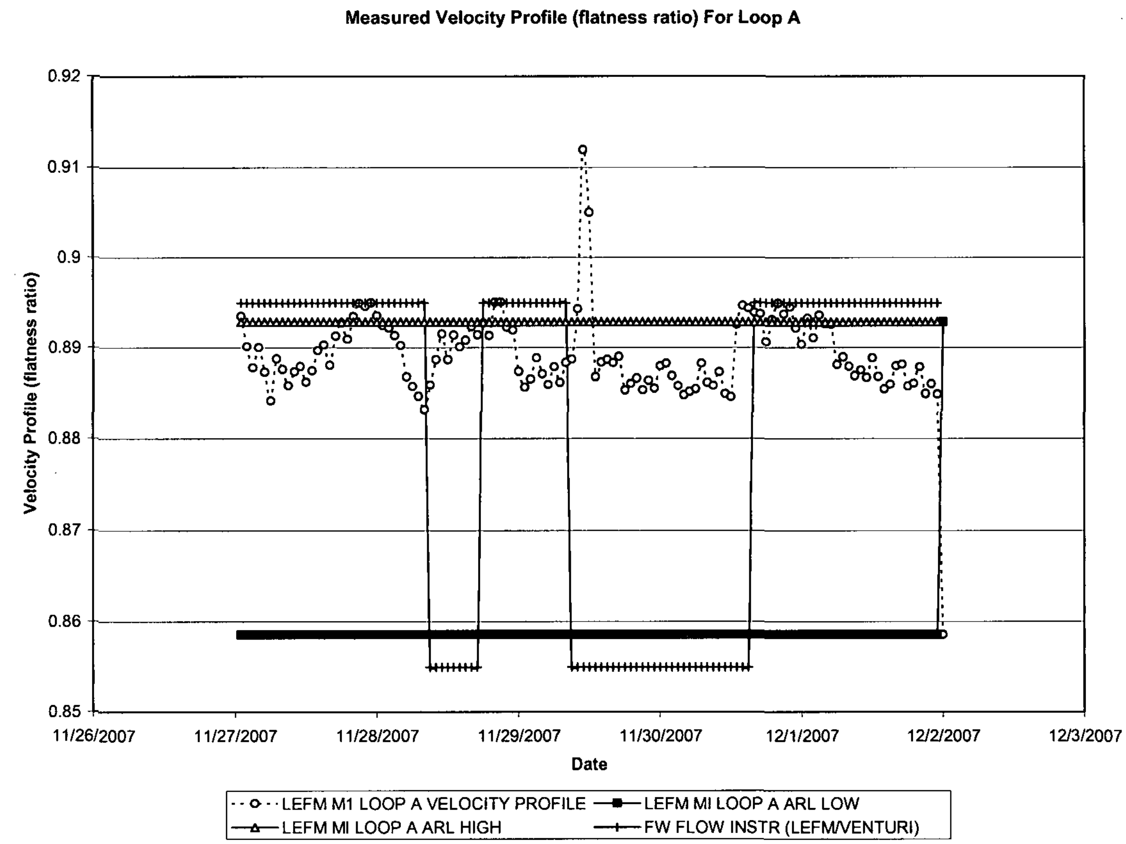

Figure 11 – Measured Velocity Profile for Loop A Before and After Loop B Transducer Replacement (11/27/07 through 12/1/07)

Figure 10 and Figure 11 sample point data was retrieved from the Plant Computer and averaged hourly.

4. Provide assessment of how transducer replacement and operating history changes affected calibration.

DBNPS Response:

The response to Question 1 contains Figures 1 and 2. Figure 12 contains a sample of data comparing LEFM and venturi flow outputs through the same time period as identified in Figures 1 and 2 and encompasses several separate transducer replacements. In Figure 12, there is a notable shift in the venturi flow rate when compared to the LEFM flow, particularly, after the November 29, 2007 transducer replacement. As discussed in ER-262, "Effects of Velocity Profile Changes Measured In-Plant on Feedwater Flow Measurement Systems," a real change in flatness ratio would result in a real calibration shift of only -0.0167%xflatness ratio + 1.0167. The indications in Figures 1 and 2 are consistent with these results. Also, as identified in the response to Question 3, the flatness ratio resulting from the replacement of Loop B transducers on November 29, 2007, slightly shifted the measured flatness ratio on Loop B. The expected shift in calibration would be approximately -0.01% for Loop B. Additionally, there was a very negligible shift in Loop A. These shifts are not discernable measurements and are overwhelmed by normal feedwater fluctuations. The slight shift in flatness ratio from pre-maintenance levels in Loop B can not be attributed with certainty to the LEFM Loop B transducer replacements or to other combined effects external to the LEFM. Therefore, it can not be determined with certainty what portions of the deviation in venturi flow can be attributed to the transducer replacement or to other combined effects external to the LEFM, such as changes in valve positions, feedwater heater efficiencies, pump speeds and neutron flux distribution in the core. The separation between the LEFM flow rates and the venturi flow rates, beginning in early November, 2007, can be attributed to fouling of the venturis, which is a well-documented occurrence within the industry.

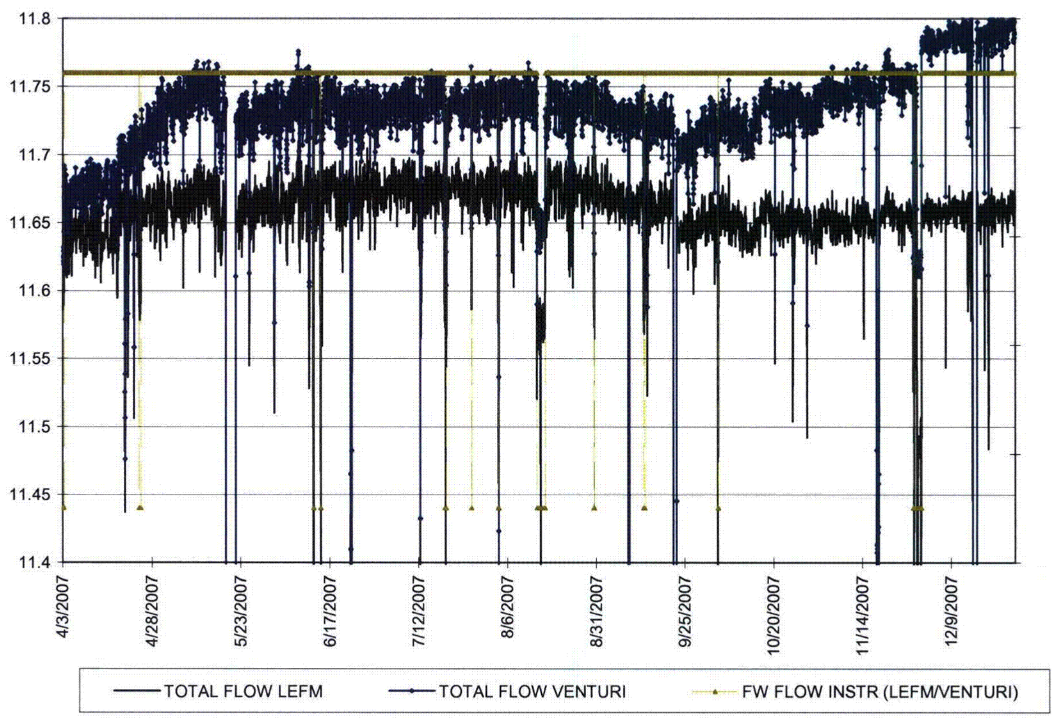

Figure 12 – Measured LEFM Flow vs. Venturi Flow (MPPH) from 4/3/07 through 12/26/07.
The LEFM was placed in service on 4/3/07 and used as Heat Balance Input.

In Figures 1, 2, and 12, transducer replacements and other instances of transducer maintenance are denoted by vertical lines in the graphs. Historical transducer replacements are listed in Table 2, which is provided in the response to Question 1. The response to Question 6 contains additional information relevant to transducer replacement periods. Some changes in measured flatness ratio could be attributed to transducer replacements, but changes in measured flatness ratio do not always occur after transducer replacement. The changes in flatness are small in any event, and are consistent with ER-551 Rev. 1, "LEFM CheckPlus Transducer Installation Sensitivity," which reports the uncertainty associated with transducer replacement. In effect, the changes are within the observational uncertainty of the measurements.

Figures 1, 2, and 12, sample point data was retrieved from the plant computer and averaged hourly.

The vendor, Cameron Measurement Systems, performed testing and analysis to generically address issues relevant to the effect of transducer replacement on instrument calibration. This information was provided to the NRC in March 2007 via ER-551, Rev. 1, and a revised uncertainty report, ER-202, Revision 3, "Bounding Uncertainty Analysis for Thermal Power Determination at Davis Besse Nuclear Power Station Using the LEFM √+ System," which incorporated the results of the transducer replacement uncertainty into the site specific analysis, was provided to FENOC in June 2007. Revision 3 of ER-202 incorporates an additional ± 0.08% line item for transducer variability uncertainty in both the profile factor uncertainty and in the installation uncertainty. The total mass flow uncertainty was thus increased from 0.26% to 0.29%. These results were consistent with the expected results predicted in Customer Information Bulletin 125 dated April 2007.

5. Discuss how noise effects perturbed the ARL test results, in comparison with noise effects, when installed in the plant.

DBNPS Response:

Actual noise levels for the meter under test at ARL are measured and documented to confirm that the calculated uncertainties are indeed bounded. In calculating the effects of noise, including coherent noise effects on the timing uncertainty of the received ultrasonic pulses, Cameron assumes a minimum threshold value for coherent noise of 40:1 for the plant installation and 150:1 for the ARL. This bounds the uncertainty effect for that level of noise, assuming the signal to noise ratio – coherent noise errors are considered as noise 90 degrees out of phase with the true signal. The same process applies to the plant installation of the meter during the commissioning process. Therefore, the coherent noise uncertainties are bounded for both applications, and the uncertainty of each is appropriately counted twice – once for the uncertainty of the profile factor and again for the total uncertainty for installation in the plant.

6. **With respect to Items 1 – 5 above, provide comparison with other plant parameters that vary with power level behavior. The intent is to examine confirmation of CheckPlus indication by use of other plant information.**

DBNPS Response:

In Figure 13, the LEFM flow is scaled vertically between 11 and 12 millions pounds mass per hour (MPPH), turbine first stage pressure scaled between 550 and 650 psig, and condenser pressure is scaled between 0 and 10 inches mercury absolute with reactor power relatively constant over the specific time period. The exceptions to maintaining a constant 100% power were primarily due to various equipment issues, maintenance, or surveillance instruction performance. Additionally, the LEFM was removed from service on several instances to support various maintenance and repairs.

Comparing the LEFM flow value to the first stage pressure and condenser pressure can identify adverse trends in secondary plant performance. The trends in Figure 13 display the LEFM flow and the condenser pressure following each other. First stage pressure follows the inverse of condenser pressure due to overall plant efficiency increasing and decreasing with condenser pressure. These three parameters display the overall plant response as being consistent with changing conditions.

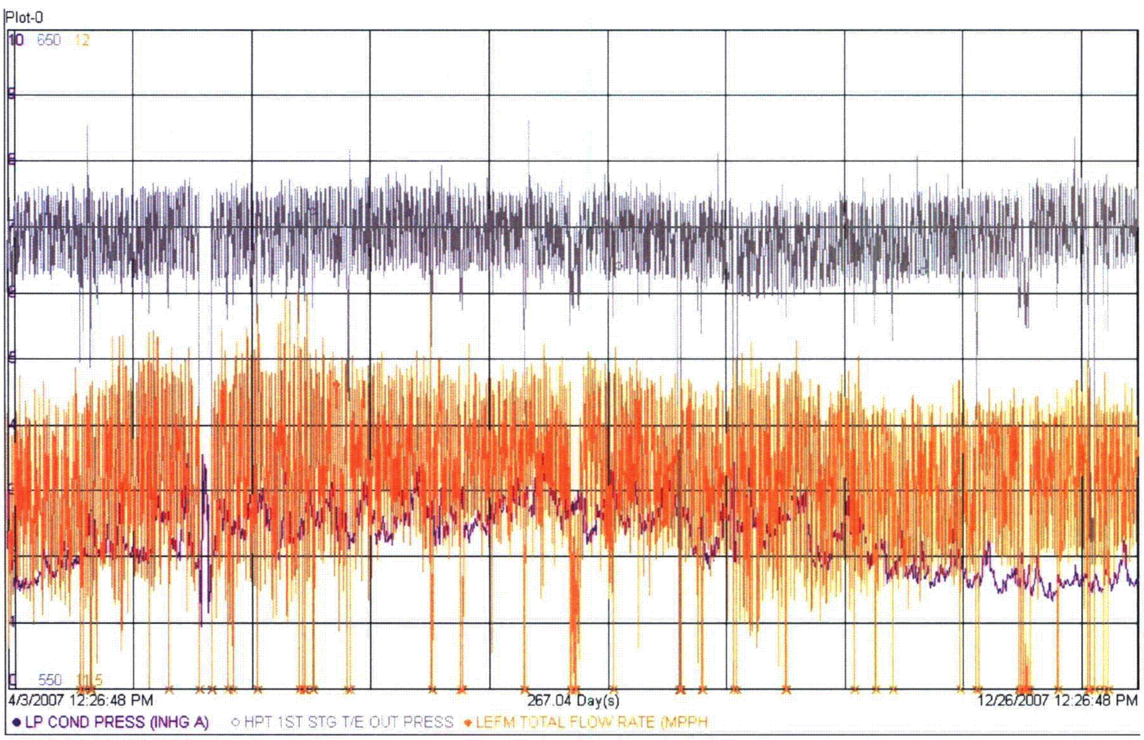

Figure 13 – LEFM Flow Versus Low Pressure (LP) Condenser Pressure and First Stage Pressure

In Figure 14, LEFM flow is scaled vertically between 11 and 12 MPPH while main feedwater resistance temperature detector (RTD) temperature is scaled between 450 and 465 degrees F. The main feedwater RTD temperature tracks consistent with LEFM flow over the entire duration. The performance of LEFM flow to main feedwater RTD temperature can be expected to always track consistent with one another unless there is a plant issue that would cause a deviation.

Other parameters can be used as well to provide a general trend, such as venturi main feedwater flow and primary heat balance. But these parameters are not practical to use as a direct comparison due the amount of uncertainty with the balance of plant instrumentation as compared to the LEFM. Use of these parameters does provide a general trend and direction in identifying an adverse condition and would require an investigation but would lack the accuracy to make a direct attributed cause.

The LEFM used at DBNPS provides a direct input to the heat balance calculation for main feedwater flow and temperature, unlike how a number of other nuclear plants use their ultrasonic flow meters. Some plants use their ultrasonic flow meters to bias their main feedwater flow venturis and maintain their venturis as an input to their heat balance calculation at all times. FENOC plans to always maintain the DBNPS LEFM independent of the venturis.

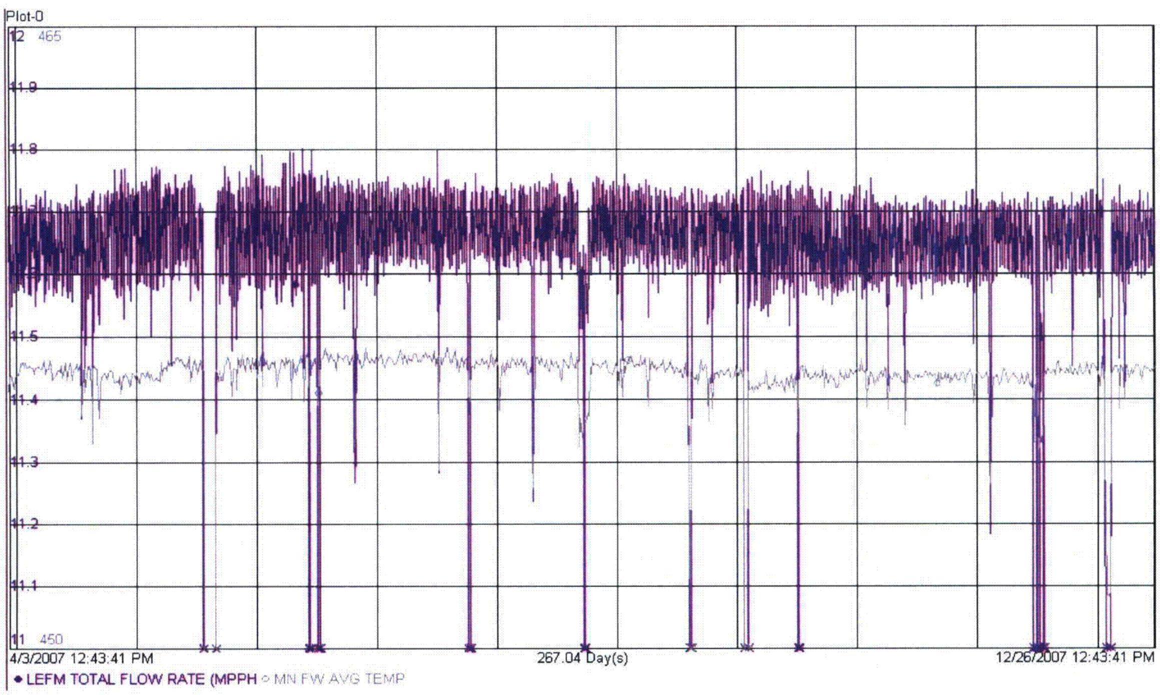

Figure 14 – LEFM Flow Versus Main Feedwater RTD Temperature

7. Taking the difference between the first table in Appendix A of ER-227 Rev. 1, the CAL90A Straight Pipe Paths 1-4 and Paths 5-8 for Loop A, give a differential value of 0.37 percent. The next table that covers the CAL90E Horizontal configuration also shows a difference but the difference is reversed. What are the reasons for these differences and how this is consistent with the claimed uncertainty?

DBNPS Response:

The CAL90A Straight Pipe test (Loop A Upstream – Horizontal) and the CAL90E Model test (Loop A Upstream – Horizontal) in Appendix A of ER-227 Rev. 1 resulted in two very different velocity profiles encountered by the CheckPlus flow element. The plots of the apparent velocity profile measured by each plane, and the actual axial velocity profile as measured by the average of the two planes, which cancels the effects of any non-axial velocities of the fluid, are shown on the graphs immediately following the tables in Appendix A. These graphs show the plane to plane meter factor difference between the measurements as an effect of the non-axial velocity profile that each encounters. Non-axial radial and tangential non-centered swirls will produce a change in velocity measured on a given path owing to the projection of these velocities onto the acoustic path. Thus, the meter factor for any given plane in any given hydraulic geometry will differ from its opposite, whose effects will be equal and opposite. Thus the measure of the error projected on one plane is determined by half the difference between planes, and the error on the average between the two is zero. This result is entirely consistent with the calculations and conclusions of the report.

8. Provide ER-168 or, alternatively, provide the information pertinent to the Reynolds Number that is summarized in ER-227 Rev. 1 Figure 6.

DBNPS Response:

As discussed with the NRC staff during a teleconference on March 4, 2008, the Reynolds Number pertinent information is contained in ARL Report, "Calibration of Two 18" Leading Edge Flow Meters for Caldon, Inc., Purchase Order Number 18350," which was provided to the NRC in FENOC correspondence dated September 18, 2007.