QA Status Evaluation
Appendix D

Is fuel flow system valid and is SODC equal to 0 or 9?

Yes

Determine active OFFM and GFFM component in fuel flow system

For each active FFM:

Determine Accuracy Test Status*

Is this a venturi, nozzle or orifice FFM?

Yes

Determine PEI Status*

* Should be performed for each component regardless of the result of any other FFM/test evaluation

Determine overall Appendix D Status according to the following hierarchy:

1) If FFM/test evaluations produced different OOC results, set overall status to “OOC-Multiple Reasons”
2) If FFM/test evaluations produced a single OOC result, set overall status to that result
3) If FFM/test evaluations produced different invalid data results, set overall status to “Invalid Data”
4) If FFM/test evaluations produced a single invalid data result, set overall status to that result
5) If any FFM/test evaluation produced a test not yet evaluated result, set overall status to “Test Not Yet Evaluated”
6) If any FFM/test evaluation produced an undetermined result, set overall status to “Undetermined”
7) If any FFM/test evaluation produced IC-Extension, set overall status to “IC-Extension”
8) Otherwise, all FFM/test evaluations will have produced IC, so set overall status to “IC”
QA Status Evaluation
Appendix D – Determine Accuracy Test Status

1. Locate most recent valid prior FFACC or FFACCTT test
   - Test found?
     - No: OOC – No Prior Accuracy Test
     - Yes: Is there an ignored test?
       - Yes: OOC – No Prior Accuracy Test – Invalid Test Ignored
       - No: Test evaluated?
         - No: Accuracy Test Not Yet Evaluated
         - Yes: OOC – Accuracy Test Has Critical Errors
           - Is there an ignored test?
             - Yes: OOC – Accuracy Test Has Critical Errors – Invalid Test Ignored
             - No: Test has critical errors?
               - Yes: OOC – Accuracy Test <Status> – Invalid Test Ignored
               - No: Test passed?
                 - Yes: OOC – Accuracy Test <Status> – Invalid Test Ignored
                 - No: Locate Intervening Event Requiring an Accuracy Test
                   - Event found?
                     - Yes: Is there an ignored test?
                       - Yes: OOC – Event – Invalid Test Ignored
                       - No: Is the current hour more than 20 quarters after the end of the quarter of the test end date?
                         - Yes: OOC – Event
                         - No: Is there an ignored test?
                           - Yes: OOC – Accuracy Test Expired – Invalid Test Ignored
                           - No: Set Accuracy Test Expiration Date to 4 quarters after the end of the quarter of the later of the test end date and reinstallation date
                             - Is the current date later than the Accuracy Test Expiration Date?
                               - Yes: IC
                               - No: Set Accuracy Test Expiration Date to 4 quarters after the end of the quarter of the later of the test end date and reinstallation date

- No: Test found?
  - Yes: Is there an ignored test?
    - Yes: OOC – No Prior Accuracy Test – Invalid Test Ignored
    - No: OOC – Event

03/04/2020
Page 2 of 8
For each quarter subsequent to the quarter of the later of the accuracy test date and reinstallation date and prior to the current quarter:

If this is a year-round reporter or if the checked quarter is the 3rd quarter for an OSO reporter,

A. add 1 quarter to the Accuracy Test Expiration Date if the checked quarter is a non-operating quarter or a non-fuel-flow-QA operating quarter,

OR

B. add 1 quarter to the Accuracy Test Expiration Date if the checked quarter is within the fuel-flow-to-load eligibility period,

OR

C. add 1 quarter to the Accuracy Test Expiration Date if if there is an NONQADB exemption for the flowmeter and the checked quarter.

If the checked quarter is the 2nd quarter for an OSO reporter,

A. add 1 quarter to the Accuracy Test Expiration Date if this quarter is within the fuel-flow-to-load eligibility period,

OR

B. add 1 quarter to the Accuracy Test Expiration Date if if there is an NONQAOS exemption for the fuel and the checked quarter,

OR

C. add 1 quarter to the Accuracy Test Expiration Date if if there is an NONQADB exemption for the flowmeter and the checked quarter.

If the checked quarter is the 1st or 4th quarter for an OSO reporter,

A. add 1 quarter to the Accuracy Test Expiration Date if if the subsequent 2nd quarter is within the fuel-flow-to-load eligibility period,

OR

B. add 1 quarter to the Accuracy Test Expiration Date if if there is an NONQAOS exemption for the fuel and the checked quarter,

OR

C. add 1 quarter to the Accuracy Test Expiration Date if if there is an NONQADB exemption for the flowmeter and the checked quarter.

Was the FFM considered ineligible for fuel-flow-to-load testing?

Yes

Was a test ignored?

Yes

OOC – Accuracy Test Expired – FF2LTST Ignored

No

Yes

OOC – Accuracy Test Expired – Invalid Test Ignored

No

OOC – Accuracy Test Expired
QA Status Evaluation
Appendix D – Determine Eligibility for Fuel-Flow-to-Load Testing for Accuracy Test

Locate a FF2LTST test for the system for any prior quarter subsequent to the later of the accuracy test end date and reinstallation date with a test result equal to PASSED, EXC/168H, INPROG, or FAILED.

Test found?

No

The system did not conduct fuel-flow-to-load testing.

Yes

Is this the only FFM in the system?

No

Was there a passing FFACC or FFACCTT test for all other FFMs in the system with an end date or reinstallation date that occurred on or prior to the method (App D) start date?

No

Was there a passing FFACC or FFACCTT test for ALL of the other FFMs in the system with an end date (or reinstallation date) that occurred in the same or adjacent quarter as the applicable prior accuracy test?

No

The system is ineligible for fuel-to-load testing

Yes

Yes

Yes

The eligibility begin quarter is the quarter of the latest end date or reinstallation date of all accuracy and PEI tests.

Are any of the FFMs in the system an orifice, nozzle, or venturi FFM?

Yes

Was there a passing PEI test for ALL of the orifice, nozzle, or venturi FFMs in the system that occurred on or prior to the method (App D) start date?

Yes

Was there a passing PEI test for ALL of the orifice, nozzle, or venturi FFMs in the system that occurred in the same or adjacent quarter as the applicable prior accuracy test?

No

No

No

No

Evaluate Fuel-Flow-to-Load Tests
QA Status Evaluation
Appendix D – Determine PEI Status

Locate most recent valid prior PEI

Test found?
- No → OOC – No Prior PEI
- Yes

Test evaluated?
- No → PEI Not Yet Evaluated
- Yes

Test has critical errors?
- Yes → OOC – PEI Has Critical Errors
- No

Test passed?
- No → OOC – PEI <Status>
- Yes

Locate Intervening Event Requiring a PEI

Event found?
- Yes → OOC – Event
- No

Is the current hour more than 20 quarters after the end of the quarter of the test end date?
- Yes → OOC – PEI Expired
- No

Set PEI Expiration Date to 12 quarters after the end of the quarter of the test end date

Is the current date later than the PEI Expiration Date?
- Yes → IC
- No

Page 2
Determine Eligibility for Fuel-Flow-to-Load Testing for PEI

For each quarter subsequent to the quarter of the PEI date and prior to the current quarter:

If this is a year-round reporter or if the checked quarter is the 3rd quarter for an OSO reporter,
A. add 1 quarter to the Accuracy Test Expiration Date if the checked quarter is within the fuel-flow-to-load eligibility period.

If the checked quarter is the 2nd quarter for an OSO reporter,
A. add 3 quarters to the Accuracy Test Expiration Date if this quarter is within the fuel-flow-to-load eligibility period.

Is the current date later than the adjusted PEI Expiration Date?

Yes → OOC – PEI Expired – FF2LTST Ignored
No → IC - Extension

Was the FFM considered ineligible for fuel-flow-to-load testing?

Yes → OOC – PEI Expired – FF2LTST Ignored
No → OOC – PEI Expired
Locate a FF2LTST test for the system for any prior quarter subsequent to the PEI date with a test result equal to PASSED, EXC168H, FEW168H, INPROG, or FAILED.

Test found?

Yes

Is this the only orifice, nozzle, or venturi FFM in the system?

No

Was there a passing PEI for ALL of the other orifice, nozzle, and venturi FFMs in the system that occurred in the same or adjacent quarter as the applicable prior PEI?

No

The system did not conduct fuel-flow-to-load testing.

Yes

Was there a passing FFACC or FFACCTT test for ALL of the FFMs in the system with an end date or (reinstallation date) that occurred in the same or adjacent quarter as the applicable prior PEI?

No

The system is ineligible for fuel-to-load testing.

Yes

The eligibility begin quarter is the quarter of the latest end date or reinstallation date of all accuracy and PEI tests.

Evaluate Fuel-Flow-to-Load Tests
QA Status Evaluation
Appendix D – Evaluate Fuel-Flow-to-Load Tests

Locate an FF2LTST for the system for any prior quarter subsequent to the applicable test end date/reinstallation date with a test result equal to "FAILED".

Test found?

Yes

Is there an ignored test?

No

OOC – FF2LTST Failed

Yes

OOC – FF2LTST Failed – Invalid Test Ignored

Locate an FF2LTST for the system for any prior quarter subsequent to the applicable test end date/reinstallation date with a test result equal to null.

Test found?

Yes

Is there an ignored test?

Yes

OOC – FF2LTST Has Critical Errors – Invalid Test Ignored

No

OOC – FF2LTST Has Critical Errors

Locate an FF2LTST for the system for any prior quarter subsequent to the applicable test end date/reinstallation date that has not yet been evaluated.

Test found?

Yes

Fuel-Flow-to-Load Test Has Not Yet Been Evaluated

No

Locate the earliest FF2LTST for the system for any prior quarter subsequent to the applicable test end date/reinstallation date with a test result equal to "PASSED", "FEW168H", or "EXC168H".

Locate the latest FF2LTST for the system for any prior quarter subsequent to the applicable test end date/reinstallation date with a test result equal to "INPROG".

Test found?

Yes

Is test result equal to FEW168H?

No

Is there an ignored test?

Yes

OOC - Invalid FF2LTST

No

Is this a fuel flow QA operating quarter or OS fuel flow operating quarter for OSO reporters?

Yes

Is the quarter after the quarter of the earliest passing or excluded test?

No

Undetermined – Missing FF2LTST

Yes

Locate the latest FF2LTST for the system for any prior quarter subsequent to the applicable test end date/reinstallation date with a test result equal to "PASSED", "FEW168H", or "EXC168H".

The quarter of this fuel-flow-to-load test is the eligibility end quarter.