SAMPLE DOCUMENT ONLY **PPA-20-012-R01 | November 11, 2020**

Provisional Procurement Authorization

Note, for use only with existing approved suppliers

PART A: REASONABLE ASSURANCE OF SUPPLIER QUALITY PROGRAM CONTINUED EFFECTIVENESS

Vendor and Station Contact Information

Sequential Number	PPA-20-012-R01
Revision Date	12/12/2020
Condition/Incident Report / Doc Reference	4186792 – Snubber Hydraulic Fluid Unavailable for 2E MSRV Snubber
Supplier Name / Number	Pond Engineering; Conestoga, PA / No. 6582
Vendor Contact /Title/Phone	John Oswald / QA Director / ###-###-####
Utility Point of Contact /Phone	Roman White / ###-###-####
Last Audit or Survey Date / No.:	03/12/2017 / NUPIC 24555
25% Audit Grace End Date:	12/12/2020
Other Information:	
Supplier Affirmation of Ongoing QA Program or Control of Critical Characteristics:	☒ Yes 10-23-2020 ☐ Not yet received
Additional Information ☒ Attached: Pond Engineering QA Affirmation	
Additional Information ☒ Referenced: Condition Report 04217069	

Reason Audit or Surveillances Can Not Be Performed at Supplier's Facility

Conestoga, Pennsylvania area is under Pennsylvania Dept of Health Covid-19 directive for limiting all but essential business and non-corporate visitors are prohibited from visiting site. Because of costs to continue to regularly supply under the current restrictions, Pond Engineering released all staff and critical staff is currently working remote with the primary distribution location and company offices closed. Their warehouse remains staffed to ensure quality storage requirements are monitored.

Reason for PPA:

☒ Critical spare part level reached ☒ Not available as received SR ☒ Inter-station or utility transfer not available
☒ Unable to dedicate commercial ☒ Alternate Supplier unavailable ☒ Impact to station (e.g., TS 3.0.3, Refueling, SOW)

☐ Other (explain below) ☐ Other (explain below) ☐ Other _____

Discussion of reason PPA is being used including urgency and basis for reasonable assurance of Quality:

Need: Station is scheduled to enter refueling outage 2R28 on January 7, 2021. Based on past refueling cycle trending, snubber fluid replacement is expected for 4 snubbers.
Alternate Means of Obtaining Part: As indicated above, all other options were reviewed without success. No spare snubbers are available for installation in this location.

Supplier Quality Performance Reviews:

The following sources have been reviewed in the previous 12 months from Date: 9/21/2020

Based on this information source, is the Supplier QA Program potentially negatively impacted? *Check appropriate box:*

Y	N	N/A		Y	N	N/A		Y	N	N/A	
☒	☐	☐	10 CFR Part 21	☐	☒	☐	NRC Insp. Reports	☐	☒	☐	INPO IRIS Reports
☐	☐	☒	Vendor Improvement Plan	☐	☒	☐	Utility CAP Reports	☒	☐	☐	Supplier QA Location
☐	☒	☐	Vendor NCRs/CARs	☐	☒	☐	Supplier QA Man. Changes	☐	☒	☐	Significant Supplier Org Changes
☐	☒	☐	Receipt Inspection Reports *(list reports reviewed and results below)*	☒	☐	☐	Vendor QA Staffing Level	☐	☒	☐	NUPIC Industry Issues *(including open findings since previous audit)*

If the answer to any of the above is "YES" or "N/A", please provide information in comments section below:

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Comments:

1. Supplier QA Location for several individuals has changed to “Remote Work Locations” until further notice. Based on an interview discussion with the QA Manager, this does not impact the overall quality program however because essential personnel still report to the work location for essential roles, and support personnel are in communication with the QA Manager.
2. Staff reduction has occurred which did not impact warehouse operations. The warehouse remains fully staffed at pre-pandemic levels. The only product available from Pond Engineering is being stored in the warehouse in sealed containers ready for shipping.
3. Part 21 Notice 2020-nn-rr is open—interim notices have been submitted and updated by Pond Engineering for batch YJS1518. Oyster Creek is the only impacted Exelon station and there is no record of interstation transfer. Final resolution and determination whether the condition represents a Significant Safety Hazard is expected in February 2021 after completion of laboratory testing and Engineering Evaluation by Pond Engineering. The batch and lot number referenced in the Part 21 was not supplied to TMI by Pond Engineering or interstation transfer from Oyster Creek. Due to this issue being unresolved, this creates uncertainty on the effectiveness of the overall quality program.

Degree of Standardization and Complexity of Items or Services:

Describe the degree of standardization and complexity of the item or service. Include any related experience in non-nuclear industries, if applicable.

Current supply of SF 1154 hydraulic fluid from Pond Engineering is from the same lot that has been distributed by Pond Engineering for the last six years with a shelf life of 20 years. The chemical composition is the same as commercially available Mobil DXT8300 hydraulic fluid which has widespread commercial use with no known issues.

Pond Engineering technical support is controlled under the TMI QA Program and are not impacted.

Receipt Inspection Reports Reviewed:

List receipt inspection reports reviewed from the last three years and their results. Provide an overall conclusion based on these results whether the supplier is adequately performing, or whether additional restrictions should be imposed prior to additional orders.

1. Report 2019-228 – No issues identified.
2. Report 2018-332 – No issues identified.

No other receipts of materials from Pond Engineering were recorded in the last three years.

Mitigating Actions Based on Review of Supplier Performance and QA Program Compliance:

If concerns are identified based on the above “Part A” evaluation, the following mitigating actions may be considered:

- **Enhanced receiving inspections beyond visual inspections and quality checks. Based on safety-significance and complexity of item, consider use of remote source verification as approved in ML20181A445.**

  Supply will coordinate with vendor and Exelon PowerLabs to perform chemical analysis of snubber hydraulic fluid.

- **Identification of any additional requirements/restrictions to be placed on the supplier:**

  Supplier will provide completed third party certification of Purchase Order technical requirements.

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Summary/Conclusion, including basis for reasonable assurance of Quality:

Determination of Interim Supplier Status:

☒ Reasonable Assurance of Quality
☒ Marginally Effective Evidence of Quality
☐ Not approved for interim consideration

Basis:
Currently, the only product available from Pond Engineering is SF 1154 hydraulic fluid. The SF 1154 is only available in sealed 5-gallon containers from their warehouse. The SF 1154 hydraulic fluid is from the same lot that has been distributed by Pond Engineering for the last six years with a shelf life of 20 years. This same lot has been used with no issues for 19 safety-related snubber applications at TMI. Pond Engineering is maintaining their QA manual and implementing procedures reviewed conform to QA requirements. Based on example test results and prior history of the supplier, there is reasonable assurance Pond Engineering is adequately and effectively implementing their QA program.

Pond Engineering is categorized as "Marginally Effective" because of an open Part 21 SSH evaluation for impacts to another lot of SF 1154 hydraulic fluid. An action tracking item (CA 23483947-03) due on March 3, 2021 will review any further details of Pond Engineering review. There are no other concerns associated with Pond Engineering Quality Assurance.

Action Tracking Items Required for Closure and Interim Actions:

This temporary ASL Reinstatement will expire? ☒ Yes ☐ No

Expiration Date: February 1, 2022

Interim review required? ☒ Yes ☐ No

Review periodicity: 6 months (Action Tracking Item 023340905-33) due on June 12, 2021.

Other actions:

Supply will coordinate with vendor and Exelon PowerLabs to perform chemical analysis of snubber hydraulic fluid (Action Tracking Item 23483947-04) due on February 3, 2021.

Supplier will provide completed third party certification of Purchase Order technical requirements (Action Tracking Item 23483947-05) due on February 3, 2021.

Review any further details of Pond Engineering Part 21 review and final determination (Action Tracking Item 23483947-03) due on March 3, 2021.

Evaluation stops here if supplier QA program can be determined with reasonable assurance to be sufficiently effective with mitigating actions to allow new items or services to be utilized on an interim basis.

End of PART A

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PART B: REVIEW OF IMPACT ON SPECIFIC PLANT APPLICATION FOR PART INSTALLATION

Should the evaluation conclude the QA program is marginally effective and there is a specific item or service needed to support plant operation and the ability to audit is not possible, continue the evaluation below to document reasonable assurance for specific items and services needed. The below evaluation should support/follow the conditional release or nonconformance disposition process.

Part Information

Vendor Part Serial Number	SCN 116-29236
Vendor Part Number	P/N SF1154HFBZJS1518-5
Vendor Part Description	SF 1154 Hydraulic Fluid Batch No. ZJS1518, 5-gallon
Station Identification Number	CatID 20006603
Station Part Description	Fluid, Hydraulic, Silicone, Clear, 5 Gallon Container
End Use Application:	1-GG-S-109A, SNUBBER - Anvil, EPS, FIGURE 200, Configuration A
Safety Related SSC Impacted:	RV-2-02-071E, “2E” Main Steam Relief Valve
ASME Code Pressure Boundary	☐ Class 1 ☐ Class 2 ☐ Class 3 ☒ N/A
Other Code/Standards	IEEE323 – Environmental Qualification
	IEEE344 – Seismic
Engineering Contact	Joseph Smith / xxx-xxx-xxxx
Classification:	☒ Safety-Related ☐ Non-Safety Related ☐ 50.69 RISC-3 (NEI 17-05)
Additional Information ☐ Attached / ☒ Referenced: Tech Eval 2892888-03	

Design Bases Function of Part:

1-GG-S-109A is one of two snubbers that support the pipe hanger on the downcomer from the "E" Main Steam relief valve (RV-2-02-071E). The 1-GG-S-109 support permits thermal movement of the piping and activates to restrict dynamic movement.

Potential Failure Mechanisms:

Potential failure mechanisms include chemical disassociation of the hydraulic fluid or increased viscocity from foreign material or chemical contamination. SF1154 is identified as (1,1,5,5-tetrapheny1-3,3,7,7-tetramethylcyclotetrasiloxane) a tetrameric cyclic siloxane oligomer containing two diphenylsiloxy units and two dimethylsiloxy units, in an alternating -diphenylsiloxy-dimethylsiloxy- repeat pattern.

Acceptable snubber functional performance would be maintained with the worst-case fluid viscosity measured by the SF1154 supplier in an increase the viscosity of the fluid from the nominal 165 cSt to 303 cSt. The performance of the Jeva cartridge that controls bleed rate in these Anvil snubbers is essentially impervious to changes in viscosity. The Jeva cartridge is also highly resistant to clogging.

Worst case low viscosity is bounded by supplier analysis to 145 cSt which would have no impact on these Anvil snubbers per engineering calculation 1-2020-222-3.

Therefore, the subject SF1154 hydraulic fluid does not impact the function of the nine snubbers the subject of this engineering evaluation.

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Operability Determination:

For stations who have not implemented NEI 18-03:
Component: 2A Emergency Diesel Generator
Tech Spec: 3.5.2(a)
☐ Operable ☒ Operable but Non-Conforming ☐ Operable but Non-Conforming with compensatory measures
☐ Operable per 50.69 RISC-3 Evaluation ☐ Inoperable

Reasonable assurance of operability exists. Due to the relatively large orifice associated with an open poppet in these Configuration A snubbers, locking velocity should be unaffected by precipitated “cyclics” of the worst-case viscocity range of up to 303 cSt . Were it to pass through the lockup valve, it would decrease the locking velocity by a factor of 0.5446 (165/303), where 165 is the nominal viscosity.

This fluid has seen extensive industry use in the last five years with no issues identified impacting the safety-related function.

Risk Assessment (not required where reasonable assurance of operability exists):

Is failure of component or piece part modeled in the station PRA? ☐ Yes ☒ No

Change in CDF: N/A

Compensatory Actions Required based on change in CDF? ☐ Yes ☒ No

Change in CDF with compensatory actions: N/A

Would failure of this component impact defense in depth? ☒ Yes ☐ No ☐ N/A

Discussion: Two snubbers are provided for this support, either capable of meeting calculated design requirements.

Would failure of this component result in reduction in safety margin? ☐ Yes ☐ No ☒ N/A

Discussion: No safety margins associated with this function.

Any other licensing / design bases issues associated with failure of this component? ☐ Yes ☒ No

Discussion: No special DB or LB considerations.

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Compensatory Measures (only required if CDF change greater than 1.0 E-07 unmitigated):

1. 1-GG-S-109B will be functionally tested prior to permitting 1-GG-S-109A to be returned to service (CA 2892888-05).

2. 1-GG-S-109A will be replaced by a refurbished snubber during the next refueling outage (1-GG-S-109A).

Close out:

This temporary ASL Reinstatement will expire? ☒ Yes ☐ No

Expiration Date: Refueling Outage2R29

Interim review required? ☒ Yes ☐ No

Review periodicity: 6 months (Action Tracking Item 023340905-33)

This form alone is not a stand-alone quality record. It is a quality record when attached to a quality document. Similar forms meeting the intent may be used.