



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

October 7, 2020

Mr. Ken J. Peters
Senior Vice President and
Chief Nuclear Officer
Attention: Regulatory Affairs
Vistra Operations Company LLC
Comanche Peak Nuclear Power Plant
6322 N FM 56
P.O. Box 1002
Glen Rose, TX 76043

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT, UNIT NO. 2 – PROPOSED ALTERNATIVE TO THE REQUIREMENTS OF THE ASME OM CODE TO EXTEND THE INSERVICE TESTING PROGRAM INTERVAL FOR CERTAIN CHECK AND RELIEF VALVES (EPID L-2020-LLR-0061 AND EPID L-2020-LLR-0062 [COVID-19])

Dear Mr. Peters:

By letter dated April 7, 2020, Vistra Operations Company LLC (the licensee), submitted a request to the U.S. Nuclear Regulatory Commission (NRC) for the use of an alternative to certain American Society of Mechanical Engineers (ASME) Code for Operation and Maintenance of Nuclear Power Plants (OM Code), requirements at Comanche Peak Nuclear Power Plant, Unit No. 2 (Comanche Peak Unit 2).

Specifically, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.55a(z)(2), the licensee requested to use the proposed Alternative V-2 on the basis that complying with the specified requirements would result in hardship or unusual difficulty. The licensee requested to extend the interval for performance of the inservice testing (IST) program for the examination activities for four specific check valves and for the testing of ten specific relief valves at Comanche Peak Unit 2 listed in the request, from refueling outage 2RF18 in the spring of 2020 to refueling outage 2RF19 scheduled to occur in the fall of 2021.

On April 9, 2020, the NRC provided verbal authorization for proposed Alternative V-2 for a one-time extension of the IST program examination interval for the four specific check valves and ten specific relief valves at Comanche Peak Unit 2 listed in the licensee's submittal dated April 7, 2020, until restart from the next refueling outage in the fall of 2021. As set forth in the enclosed safety evaluation, the NRC staff concludes that proposed Alternative V-2 will provide reasonable assurance that the specified check valves and relief valves at Comanche Peak Unit 2 are operationally ready to perform their safety functions unit the next refueling outage currently scheduled for the fall of 2021. The NRC staff finds that compliance with the specified requirements in the ASME OM Code would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. Accordingly, the NRC staff concludes that the licensee has adequately addressed the regulatory requirements set forth in

10 CFR 50.55a(z)(2). If the licensee identifies a performance issue with any of these check valves or relief valves, the licensee will be expected to take action to implement the requirements of its technical specifications. This authorization will remain in effect until restart from the next refueling outage for Comanche Peak Unit 2 in the fall of 2021. The licensee's disassembly and examination plans for the specified check valves and testing plans for the specified relief valves may be adjusted as appropriate by any subsequent NRC-authorized alternative requests.

All other requirements in the ASME OM Code for which relief was not specifically requested and approved in this request remains applicable.

If you have any questions, please contact the Project Manager, Dennis Galvin, at 301-415-6256 or Dennis.Galvin@nrc.gov.

Sincerely,

Jennifer L. Dixon-Herrity, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-446

Enclosure:
Safety Evaluation

cc: Listserv



UNITED STATES
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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
PROPOSED ALTERNATIVE V-2 REGARDING SPECIFIED CHECK VALVE EXAMINATION
EXTENSION AND RELIEF VALVE TEST INTERVAL EXTENSION
VISTRA OPERATIONS COMPANY LLC
COMANCHE PEAK NUCLEAR POWER PLANT, UNIT NO. 2
DOCKET NO. 50-446

1.0 INTRODUCTION

By letter dated April 7, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20099D059), Vistra Operations Company LLC (the licensee), submitted a request to the U.S. Nuclear Regulatory Commission (NRC) for the use of an alternative to specific inservice testing (IST) program requirements in the American Society of Mechanical Engineers (ASME) Code for Operation and Maintenance of Nuclear Power Plants (OM Code), 2004 Edition through 2006 Addenda, for Comanche Peak Nuclear Power Plant, Unit No. 2 (Comanche Peak Unit 2).

Specifically, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.55a(z)(2), the licensee requested to use the proposed alternative on the basis that complying with the specified requirement would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. The licensee requested in the proposed Alternative V-2 authorization, to extend the performance of the IST program examination activities for four specific check valves and IST program testing of ten specific relief valves at Comanche Peak Unit 2 listed in the request, from refueling outage 2RF18 in the spring of 2020 to refueling outage 2RF19 scheduled to occur in the fall of 2021. In its submittal, the licensee requested to implement proposed Alternative V-2 for the four specified check valves and ten specified relief valves at Comanche Peak Unit 2 on the basis that compliance with the ASME OM Code check valve examination requirements during the spring 2020 refueling outage would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

On April 9, 2020, the NRC provided a verbal authorization (ADAMS Accession No. ML20101P040) for the proposed one-time extension of the IST program examination interval for the four specific check valves and the IST program testing interval for the ten specific relief valves at Comanche Peak Unit 2 specified in the licensee's submittal dated April 7, 2020. The verbal authorization documentation provides a summary of the NRC staff evaluation for this proposed alternative. This safety evaluation (SE) provides the details of the NRC staff review of proposed Alternative V-2 for the specified check valves and relief valves.

Enclosure

2.0 REGULATORY EVALUATION

The NRC regulations in 10 CFR 50.55a(f)(4), "Inservice testing standards requirement for operating plants," state, in part, that,

Throughout the service life of a boiling or pressurized water-cooled nuclear power facility, pumps and valves that are within the scope of the ASME OM Code must meet the inservice test requirements (except design and access provisions) set forth in the ASME OM Code and addenda that become effective subsequent to editions and addenda specified in [10 CFR 50.55a(f)(2) and (3)] and that are incorporated by reference in [10 CFR 50.55a(a)(1)(iv)], to the extent practical within the limitations of design, geometry, and materials of construction of the components.

The NRC regulations in 10 CFR 50.55a(z), "Alternatives to codes and standards requirements," state, that alternatives to the requirements of 10 CFR 50.55a(f) may be used, when authorized by the NRC, if the licensee demonstrates (1) the proposed alternatives would provide an acceptable level of quality and safety, or (2) compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

The applicable ASME OM Code of Record for the IST program at Comanche Peak Unit 2 during its current 10-year IST program interval is the 2004 Edition through 2006 Addenda (OMb-2006) of the ASME OM Code as incorporated by reference in 10 CFR 50.55a. At the time of this request, Comanche Peak Unit 2 was preparing for refueling outage 2RF18 to begin in the spring of 2020, with refueling outage 2RF19 scheduled to occur in the fall of 2021.

3.0 TECHNICAL EVALUATION

3.1 The Licensee's Proposed Alternative V-2

3.1.1 Applicable ASME OM Code Requirements for Check Valves

The IST requirements of the ASME OM Code as incorporated by reference in 10 CFR 50.55a related to proposed Alternative V-2 for check valves are as follows:

ASME OM Code (2004 Edition through the 2006 Addenda), Subsection ISTC, "Inservice Testing of Valves in Light-Water Reactor Nuclear Power Plants," paragraph ISTC-5221 "Valve Obturator Movement," subparagraph (c)(3), states that "At least one valve from each group shall be disassembled and examined at each refueling outage; all valves in each group shall be disassembled and examined at least once every 8 yr."

3.1.2 Applicable ASME OM Code Requirements for Relief Valves

The IST requirements of the ASME OM Code as incorporated by reference in 10 CFR 50.55a related to proposed Alternative V-2 for relief valves are as follows:

ASME OM Code (2004 Edition through 2006 Addenda), Mandatory Appendix I, "Inservice Testing of Pressure Relief Devices in Light-Water Reactor Nuclear Power Plants,"

paragraph I-1320, "Test Frequencies, Class 1 Pressure Relief Valves," subparagraph (a), "5-Year Test Interval," states:

Class 1 pressure relief valves shall be tested at least once every 5 years, starting with initial electric power generation. No maximum limit is specified for the number of valves to be tested within each interval; however, a minimum of 20% of the valves from each valve group shall be tested within any 24-month interval. This 20% shall consist of valves that have not been tested during the current 5-year interval, if they exist. The test interval for any individual valve shall not exceed 5 years.

ASME OM Code, Mandatory Appendix I, paragraph I-1350, "Test Frequency, Classes 2 and 3 Pressure Relief Valves," subparagraph (a), "10-year Test Interval," states:

Classes 2 and 3 pressure relief valves, with the exception of PWR [pressurized water reactor] main steam safety valves, shall be tested every 10 years, starting with initial electric power generation. No maximum limit is specified for the number of valves to be tested during any single plant operating cycle; however, a minimum of 20% of the valves from each valve group shall be tested within any 48-month interval. This 20% shall consist of valves that have not been tested during the current 10-year test interval, if they exist. The test interval for any individual valve shall not exceed 10 years. PWR main steam safety valves shall be tested in accordance with I-1320.

3.1.3 Reason for Request

In its submittal dated April 7, 2020, the licensee indicated that Comanche Peak Unit 2 was scheduled to begin its next refueling outage in the spring of 2020. The licensee reported that four check valves listed in its request were at the end of their examination intervals as specified by the ASME OM Code, and were scheduled to be disassembled and examined during the refueling outage in the spring of 2020. The licensee also reported that ten relief valves listed in its request were at the end of their test intervals as specified by the ASME OM Code, Appendix I, paragraphs I-1320 and I-1350, and were scheduled to be tested during the refueling outage in the spring of 2020.

The United States government declared a national emergency associated with the Coronavirus Disease 2019 (COVID-19) outbreak on March 13, 2020. Additionally, in the state of Texas, where Comanche Peak is located, a Major Disaster Declaration was declared on March 25, 2020, to take actions necessary to reduce exposure to the virus associated with the COVID-19 outbreak. The licensee indicated that the Centers for Disease Control and Prevention (CDC) was recommending social distancing as it applies to COVID-19. The CDC defines social distancing as "remaining out of congregate settings, avoiding mass gatherings, and maintaining distance (approximately 6 feet or 2 meters) from others when possible." In the case of performing the IST activities for check valve disassembly and examination and relief valve testing at a nuclear power plant, the licensee reported that this recommendation cannot be effectively implemented.

The licensee stated that Comanche Peak was reducing activities associated with the spring 2020 refueling outage (2RF18), which was scheduled to begin on April 19, 2020, in order to limit the spread of the COVID-19 virus. The licensee indicated that many of the IST program activities involve close contact with personnel working in tight spaces and thereby

limits social distancing capabilities. The licensee reported that further review has determined that close contact required to perform the IST program activities for check valves and the required relief valve testing could be detrimental to the occupational health and safety of the workforce and result in the potential to spread the virus. Additionally, the licensee noted that the station might experience critical shortages of specially trained and qualified personnel due to illness, which will greatly affect completion of these required IST activities during the spring 2020 refueling outage. The licensee stated that the IST program activities require several valve maintenance technicians, and other support personnel (e.g., scaffold builders, radiation protection technicians, and other maintenance personnel).

The licensee indicated the performance of the IST program activities associated with the check valves and relief valves listed in its request would represent a hardship or unusual difficulty without a compensating increase in level of quality or safety during the COVID-19 pandemic. Pursuant to 10 CFR 50.55a(z)(2), the licensee requested authorization for a one-time IST program examination interval extension for the specific check valves and a one-time IST program test interval extension for the specific relief valves identified in its request from the spring 2020 refueling outage to the next refueling outage in the fall of 2021.

3.1.4 Licensee's Proposed Alternative V-2 for Check Valves

The licensee proposed a one-time extension of the IST program disassembly and examination interval for the check valves listed in its request to the next refueling outage in the fall of 2021. In particular, the licensee proposed to defer the disassembly and examination required by ASME OM Code, Subsection ISTC, paragraph ISTC-5221(c)(3), until the next refueling outage in the fall of 2021.

The licensee requests an extension of the IST program examination interval for the following check valves:

Table 1			
Valve ID	Function	ASME Code Class	ASME OM Category
2CT-0145	Containment Spray Flowpath/Containment Isolation	2	A/C
2FW-0082	Main Feedline Break Isolation	2	C
2CS-8442	Boration Flowpath	2	C
2DO-0049	Fuel Oil Flowpath	3	C

3.1.5 Licensee's Proposed Alternative V-2 for Relief Valves

The licensee proposed a one-time extension of the IST program test intervals for the specific relief valves listed in its request to the next refueling outage for Comanche Peak Unit 2 in the fall of 2021.

With respect to the relief valves listed in its submittal, the licensee proposed the following:

- In lieu of the ASME OM Code, Appendix I, paragraph I-1350(a) requirement to test specific Class 2 and 3 pressure relief valves every 10 years, alternatively extend the

interval to 11 years so that the specific relief valve testing may be deferred to the next refueling outage currently scheduled for the fall of 2021.

- In lieu of the ASME OM Code, Appendix I, paragraph I-1350(a) requirement to test a minimum of 20 percent of the valves from each relief valve group within any 48-month interval for specific relief valves at Comanche Peak Unit 2, alternatively extend the interval to 54-months for specific relief valves at Comanche Peak Unit 2 so that the specific relief valve tests may be deferred to the next refueling outage currently scheduled for the fall of 2021.
- In lieu of the ASME OM Code, Appendix I, paragraph I-1320(a) requirement to test specific PWR Class 2 Main Steam Safety Valves (MSSVs) every 5 years, alternatively extend the interval to 6 years so that the specific MSSV tests may be deferred to the next refueling outage currently scheduled for the fall of 2021.
- In lieu of the ASME OM Code, Appendix I, paragraph I-1320(a) requirement to test a minimum of 20 percent of the valves from each valve group within any 24-month interval for specific MSSVs at Comanche Peak Unit 2, alternatively extend the interval to 36 months for specific MSSVs at Comanche Peak Unit 2 so that the specific valve tests may be deferred to the next refueling outage currently scheduled for the fall of 2021.

In the event that Comanche Peak Unit 2 has an extended shutdown prior to 2RF19, and the pandemic restrictions have been relaxed, the licensee stated that a good faith effort to test the valves that were deferred from 2RF18 during the unplanned shutdown will be made in a similar manner as is expected for cold shutdown exercise testing.

The licensee’s basis for the extension of the test intervals for the specific relief valves identified in its request is provided in Table 2 of this SE.

Table 2 Relief Valves Requested for IST Interval Extension

Valve ID	ASME OM Code	Licensee Basis for Test Interval Extension
MSSVs 2MS-0023 2MS-0058 2MS-0061 2MS-0062 2MS-0095 2MS-0131 2MS-0132	I-1320(a)	Over the last two 5-year testing cycles for this 20-member valve group, no additional valves have required testing per I-1320(c)(1). Of the 40 tests reviewed, a set pressure adjustment was required to achieve an as-left setting of +/-1% of the required set pressure during only 11 of the 40 tests. For each valve, set pressure adjustment was required only one time over the last two testing cycles. Of the 11 valves which required adjustment, if setpoint drift is extrapolated to a 6-year test interval, their anticipated as-found values fall within acceptance criteria with >= 0.5% (6 pounds per square inch gauge) margin to the +/-3% as-left acceptance criteria. Further, no deficiencies, adverse trends, or open maintenance work orders were identified that would impact or degrade each valve’s performance capability and exclude it from this interval extension relief request (RR). Therefore, a 6-year interval is acceptable, and one-time relief is requested from the requirement

		<p>to test each MSSV at least once every 5 years on the basis that the requirement could be detrimental to the occupational health and safety of plant personnel. Additionally, between 2RF18 and 2RF19, one-time relief from the requirement to test a minimum of 20 percent of the valves from each valve group within any 24-month interval is requested since compliance with this requirement could be detrimental to the occupational health and safety of plant personnel. Relief will allow Comanche Peak to defer testing of any members of this group of relief valves from 2RF18 to 2RF19.</p>
<p>Residual Heat Removal Pump (RHR PMP) 2-02 SUCT (Suction) Relief Valve 2-8708B</p>	<p>I-1350(a)</p>	<p>This valve is in a group of only two valves. For this two-valve group, one valve is required to be tested every other refueling outage such that each is required to be tested on a 6-year interval due to the limited group size. Group size is limited due to the lack of similar components elsewhere in the plant. During the last two successive tests, no additional valves have required testing per I-1350(c)(1), visual inspections and seat tightness have been satisfactory, and no adjustments have been required to maintain the set pressure of either valve within the acceptance criteria. Since there is assurance that the valves do not degrade over time, the group interval extension is acceptable. Further, no deficiencies, adverse trends, or open maintenance work orders were identified that would impact or degrade each valve's performance capability and exclude it from this interval extension RR. Between 2RF18 and 2RF19, one-time relief from the requirement to test a minimum of 20 percent of the valves from each valve group within any 48-month interval is requested since compliance with this requirement could be detrimental to the occupational health and safety of plant personnel. Relief will allow Comanche Peak to defer testing of any members of this group of relief valves from 2RF18 to 2RF19.</p>
<p>Reactor Cavity Sump (RX CAV SMP) and Containment Sump (CNTMT SMP) 2-01/2-02 Discharge Header Pressure (DISCH HDR PRESS) Relief Valve 2VD-0896</p>	<p>I-1350(a)</p>	<p>2VD-0896 is in a group of three valves. For this three-valve group, one valve is tested every other re-fueling outage such that each is tested on a 9-year interval. During the last two successive tests of each valve in the group, one valve failed as-found set pressure testing on one occasion. All other as-found visual inspection, seat tightness, and set pressure tests were satisfactory. 2VD-0896 passed its last two successive tests but was replaced with a spare following its earlier test due to unsatisfactory seat leakage during as-left testing. Similarly, 2WP-7176 passed its last two successive tests, but was replaced with a spare following its later test due to unsatisfactory seat leakage during as-left testing. The one set pressure failure of 2RC-0036 was attributed to setpoint drift since no other cause for the change was identified during the subsequent disassembly inspection. Despite the test failure, the valve was capable of performing as designed since it would have provided adequate overpressure protection for the protected components. In summary, all three valves were capable of performing as designed over the last two successive test intervals and 2VD-0896 experienced <1 pound per square inch (psi) of setpoint drift</p>

		<p>between the last two tests. Therefore, extension of the test interval for 2VD-0896 is acceptable. Further, no deficiencies, adverse trends, or open maintenance work orders were identified that would impact or degrade each valve's performance capability and exclude it from this interval extension RR. The 10-year interval for 2VD-0896 expires on April 5, 2021. The addition of 6 months grace period authorized by RR T-1 (ASME Code Case OMN-20, "Inservice Test Frequencies") may also be insufficient to prevent exceeding the 10-year test interval prior to 2RF19. Between 2RF18 and 2RF19, one-time relief from the 10-year test interval requirement and the requirement to test a minimum of 20 percent of the valves from each valve group within any 48-month interval is requested since compliance with these requirements could be detrimental to the occupational health and safety of plant personnel. Relief will allow Comanche Peak to defer testing of any members of this group of relief valves from 2RF18 to 2RF19.</p>
SI ACCUM 2-03 Relief Valve 2-8855C	I-1350	<p>2-8855C is in a group of four valves, which provide overpressure protection for their respective safety injection accumulator (SI ACCUM). During the last two successive tests of each valve in the group, one valve failed as-found set pressure testing on both occasions. All other as-found tests (visual inspection, seat tightness, and set pressure) for the other valves were satisfactory, and set pressure adjustment has been required on only one occasion. The two set pressure failures of 2-8855D were attributed to bonding of the disc to the seat due to a faulty O-ring, and the valve has since been replaced with a spare and reworked to include O-ring replacement. Despite the test failures, the valve was capable of performing as designed since it would have provided adequate overpressure protection for the respective accumulator. Since all valves in the group were tested in 2017, the requested group extension will not result in any valve exceeding its 10-year maximum interval. 2-8855C has performed consistently during the last two successive tests without the need for adjustment and set pressure drift of only 1 psi over a 5-year interval. Further, no deficiencies, adverse trends, or open maintenance work orders were identified that would impact or degrade each valve's performance capability and exclude it from this interval extension RR. Therefore, extension of the group test interval is acceptable. Between 2RF18 and 2RF19, one-time relief from the requirement to test a minimum of 20 percent of the valves from each valve group within any 48-month interval is requested since compliance with this requirement could be detrimental to the occupational health and safety of plant personnel. Relief will allow Comanche Peak to defer testing of any members of this group of relief valves from 2RF18 to 2RF19.</p>

3.1.6 Licensee's Evaluation of Proposed Alternative V-2

The licensee stated that an evaluation was performed for each check valve and relief valve identified in its request that utilized detailed data from the most recent check valve examination and the most recent relief valve test, and a review of the maintenance history for each check valve and relief valve. The licensee indicated that this evaluation concluded that the proposed alternative is acceptable, and that deferral of the specific check valve activities and the specific relief valve testing from the spring 2020 refueling outage to the next refueling outage in the fall of 2021 would not result in an adverse consequence to safety. The licensee reported that no deficiencies, adverse trends, or open maintenance work order were identified that would impact or degrade each check valve's and relief valve's performance capability. The licensee considered that based on the check valves' and relief valves' current acceptable performance, there is reasonable assurance that each check valve and relief valve will be operationally ready to perform its safety function for the duration of this request.

In summary, the licensee stated that extending the examination interval for each check valve and relief valve in the scope of its request to the next refueling outage scheduled for the fall of 2021 would not adversely impact the function of the check valve or result in a reduction in plant safety. In the current pandemic environment, the licensee considered that performing the specific IST program activities for the identified check valves and performing the required relief valve tests would result in an increased risk of virus exposure to plant personnel and a reduction in occupational health and safety without a compensating benefit. Therefore, the licensee asserted that this one-time request meets the criteria in 10 CFR 50.55a(z)(2) for proposing IST program alternatives on the basis that compliance with the ASME OM Code check valve disassembly and examination and relief valve testing requirements during the spring 2020 refueling outage would result in hardship or unusual difficulty without a compensating increase in level of quality or safety during the COVID-19 pandemic.

3.2 NRC Staff Evaluation

3.2.1 NRC Staff Evaluation for Check Valves

As incorporated by reference in 10 CFR 50.55a, ASME OM Code (2004 Edition through the 2006 Addenda), Subsection ISTC, paragraph ISTC-5221, requires check valve obturator movement during exercise testing to be demonstrated by performing both an open and a close test. Check valves with both an open and close safety function shall be exercised by initiating flow and observing that the obturator has travelled to either the full open position or to a position required to perform its intended function and verify cessation of flow or reversal of flow indicating the obturator has traveled to the seat. A mechanical exerciser may be used with acceptance criteria specified by the Owner. If these test methods are impractical to perform or if sufficient flow cannot be achieved or verified, a sample disassembly examination program shall be used to verify valve obturator movement. The sample disassembly examination program shall group check valves of similar design, application, and service condition, and require a periodic examination of one valve from each group. At least one valve from each group shall be disassembled and examined at each refueling outage; all valves in each group shall be disassembled and examined at least once every 8 years.

In lieu of performing the ASME OM Code required disassembly and examination of check valves during the spring 2020 refueling outage, the licensee requested a one-time extension to the next refueling outage currently scheduled for fall of 2021 for the specified check valves at Comanche Peak Unit 2. In its request, the licensee reported that its review of the maintenance

and test history for the four specific check valves at Comanche Peak Unit 2 listed in its submittal showed that these check valves had no deficiencies, adverse trends, or maintenance work orders that would impact or degrade the check valves' performance capability. The licensee stated that for each of these specific check valves at Comanche Peak Unit 2, the past two disassembly examinations verified that the valve internals were structurally sound; and the visual inspection of the valve body, disc, and seat for indications of damage or degradation were completed with satisfactory results. The licensee considered that these results support an extension of the disassembly examination interval for the specified check valves.

In response to the licensee's request, the NRC staff reviewed the historical performance of the check valves listed in the licensee's submittal, and performed a review of check valve operating experience using Industry Reporting Information System (IRIS) database established by the Institute of Nuclear Power Operations. The NRC staff found no adverse operating experience events in the IRIS database for the check valves listed in the licensee's submittal. As a result, the NRC staff determined that the valves listed in the licensee's submittal have had satisfactory performance history. No deficiencies have been identified, nor any adverse trends or maintenance work orders that could impact or degrade the check valves' performance. The NRC staff considers that requiring the check valves listed in the licensee's submittal to be disassembled and examined during the spring 2020 refueling outage with limited personnel resources represents a hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Based on the information described above for the four specific check valves at Comanche Peak Unit 2 identified in the licensee's submittal, the NRC staff found that (1) the previous two disassembly examinations indicate their acceptable historical performance; (2) no current concerns with the performance of these check valves have been identified; (3) periodic maintenance activities are not modified by this request; and (4) a hardship exists for the performance of disassembly and examination of these check valves during the spring 2020 refueling outage that would be contrary to the health and safety of plant personnel. Therefore, the NRC determined that the licensee's proposed alternative for a one-time extension of the examination interval for the four specified check valves at Comanche Peak Unit 2 is acceptable in accordance with 10 CFR 50.55a(z)(2). The proposed alternative will provide reasonable assurance that the check valves listed in the licensee's request will be operationally ready to perform their safety functions until the next refueling outage in the fall of 2021.

3.2.2 NRC Staff Evaluation for Relief Valves

As incorporated by reference in 10 CFR 50.55a, ASME OM Code (2004 Edition through 2006 Addenda), Mandatory Appendix I, paragraph I-1350(a) requires, in part, that ASME *Boiler and Pressure Vessel Code* (BPV Code) Classes 2 and 3 pressure relief valves, with the exception of PWR MSSVs, shall be tested every 10 years, starting with initial electric power generation. ASME OM Code (2004 Edition through 2006 Addenda), Mandatory Appendix I, paragraph I-1320(a) requires, in part, that ASME BPV Code Class 1 pressure relief valves shall be tested at least once every 5 years, starting with initial electric power generation.

In lieu of performing the ASME OM Code required testing of relief valves during the spring 2020 refueling outage, the licensee requested a one-time extension to the next refueling outage (2RF19) currently scheduled for the fall of 2021 for the specified relief valves at Comanche Peak Unit 2. In its request, the licensee reported that the seven MSSVs, specified in its submittal, are part of a 20-member valve group that is tested in accordance with ASME OM Code, Mandatory Appendix I, paragraph I-1320(a), which requires a 5-year test interval with a

20 percent sample of the valves in the group to be tested every 24 months. The licensee indicated that over the last two 5-year testing cycles for the 20-member valve group, no additional valves were required to be tested by the acceptance criteria in subparagraph I-1320(c), "Requirements for Testing Additional Valves," in Mandatory Appendix I. Of the valves in this 20-member valve group that needed adjustment based on the as-found values, the licensee reported that extrapolation of the setpoint drift would not have reached the as-left acceptance criteria for any of these valves. For these valves listed in the submittal, the licensee had not identified any deficiencies, adverse trends, or maintenance work orders that would impact or degrade the relief valves' performance capability.

In its request, the licensee indicated that three of the relief valves listed in its submittal are tested in accordance with ASME OM Code, Mandatory Appendix I, paragraph I-1350(a), which requires a 10-year test interval with 20 percent sample of the valves in the group to be tested every 48 months. With respect to Relief Valve 2-8708B, the licensee reported that during the last two successive tests, no adjustments have been necessary to maintain the set pressure within the acceptance criteria; and the visual inspections and seat tightness have been satisfactory. With respect to Relief Valve 2VD-0896, the licensee reported that this valve has been capable of performing as designed over the last two successive tests, and has experienced less than 1 psi of setpoint drift between the last two tests. With respect to Relief Valve 2-8855C, the licensee reported that this relief valve has performed consistently during the last two successive tests without the need for adjustment. For these valves listed in the submittal, the licensee had not identified any deficiencies, adverse trends, or maintenance work orders that would impact or degrade these valves' performance capability.

The NRC staff has determined that the relief valves listed in the licensee's request have had satisfactory performance history. No deficiencies have been identified, nor any adverse trends or maintenance work orders that could impact or degrade the relief valves' performance. The NRC staff considers that requiring the relief valves identified in the licensee's request to be tested during the spring 2020 refueling outage with limited personnel resources represents a hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Based on the information described above for the ten specific relief valves at Comanche Peak Unit 2 identified in the licensee's submittal, the NRC staff found that (1) previous testing of these relief valves indicates their acceptable historical performance; (2) no current concerns with the performance of these relief valves have been identified; (3) periodic maintenance activities are not modified by this request; and (4) a hardship exists for the performance of team-oriented testing of these relief valves during the spring 2020 refueling outage that would be contrary to the health and safety of plant personnel. Therefore, the NRC determined that the licensee's proposed alternative for a one-time extension of the testing interval for the ten specified relief valves at Comanche Peak Unit 2 is acceptable in accordance with 10 CFR 50.55a(z)(2). The proposed alternative will provide reasonable assurance that the relief valves listed in the licensee's request will be operationally ready to perform their safety functions until the next refueling outage in the fall of 2021.

4.0 CONCLUSION

On April 9, 2020, the NRC provided verbal authorization for proposed Alternative V-2 for a one-time extension of the IST program examination interval for the four specific check valves and the IST program test interval for the ten specific relief valves at Comanche Peak Unit 2 listed in the licensee's submittal dated April 7, 2020, until restart from the next refueling outage in the fall of 2021. As described in this SE, the NRC staff concludes that proposed

Alternative V-2 will provide reasonable assurance that the specified check valves and relief valves at Comanche Peak Unit 2 are operationally ready to perform their safety functions unit the next refueling outage currently scheduled for the fall of 2021. The NRC staff finds that compliance with the specified requirements in the ASME OM Code for disassembly and examination of the specified check valves and for testing of the specified relief valves at Comanche Peak Unit 2 during the spring 2020 refueling outage would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. Accordingly, the NRC staff concludes that the licensee has adequately addressed the regulatory requirements set forth in 10 CFR 50.55a(z)(2). If the licensee identifies a performance issue with any of these check valves or relief valves, the licensee will be expected to take action to implement the requirements of its technical specifications. This authorization will remain in effect until restart from the next refueling outage for Comanche Peak Unit 2 in the fall of 2021. The licensee's disassembly and examination plans for the specified check valves and testing plans for the specified relief valves may be adjusted as appropriate by any subsequent NRC-authorized alternative requests.

All other ASME OM Code requirements as incorporated by reference in 10 CFR 50.55a for which relief or an alternative was not specifically requested and approved as part of this subject request, for the specified check valves and relief valves remain applicable.

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Date: October 7, 2020

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT, UNIT NO. 2 – PROPOSED ALTERNATIVE TO THE REQUIREMENTS OF THE ASME OM CODE TO EXTEND THE INSERVICE TESTING PROGRAM INTERVAL FOR CERTAIN CHECK AND RELIEF VALVES (EPID L-2020-LLR-0061 AND EPID L-2020-LLR-0062 [COVID-19]) DATED OCTOBER 7, 2020

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