

3.5 Historic and Cultural Resources

Historic and cultural resources refer to archaeological sites, historic buildings, traditional cultural properties important to a living community, shipwrecks, and other resources considered through the NHPA (National Historic Preservation Act-TN4157). Historic and cultural resources that have been determined to be significant include those that have been determined eligible for inclusion on or formally listed in the National Register of Historic Places (NRHP). Section 106 of the NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties that are listed or eligible for listing on the NRHP (36 CFR Part 800-TN513). If historic and cultural resources are present, the eligibility of any historic properties for listing on the NRHP is determined through the application of the NRHP criteria in 36 CFR 60.4 (36 CFR Part 60-TN1682) in consultation with the State Historic Preservation Office, American Indian Tribes (Tribes) that attach cultural and religious significance to historic properties, and other interested parties.

In accordance with 36 CFR 800.8(c), the U.S. Nuclear Regulatory Commission (NRC) initiated the NHPA Section 106 consultation process and notified consulting parties, including the Advisory Council on Historic Preservation (ACHP), the Texas Historical Commission (THC), and Tribes, of its intent to use the National Environmental Policy Act (42 U.S.C. § 4321, et seq- TN8608) process to comply with Section 106 of the NHPA (see Section 3.5.6.2 for more information regarding consultations).

This section of the environmental assessment (EA) includes the NRC staff's NHPA, Section 106 review and finding that the proposed action will result in no historic properties affected. The NRC staff solicited public comments for 30 days on this finding and shared the initial draft of this EA with this finding with Tribes, the Texas Commission on Environmental Quality, ACHP, and the Texas Historical Commission for comment over a 30-day period. The NRC did not receive any comments.

The undertaking before the NRC is whether to issue a Construction Permit (CP) to Abilene Christian University (ACU) authorizing the construction of the Molten Salt Research Reactor (MSRR) within the Gayle and Max Dillard Science and Engineering Research Center (SERC) building. ACU would need to apply for, and receive, a separate Operating License from the NRC in order to operate the MSRR. That authorization would constitute a separate undertaking and would require a separate NHPA Section 106 review and consultation. Similarly, decommissioning the MSRR would require separate authorization from the NRC and a separate NHPA Section 106 review and consultation.

The MSRR would be constructed within the existing SERC building on the ACU campus (Figure 3-2). The SERC building is located on a parcel in the southeast corner of the ACU campus in the City of Abilene, which is located 150 mi (241 km) west of Fort Worth, in west central Texas. The SERC site encompasses approximately 15 ac of land, which the NRC staff considers to be the Area of Potential Effect (APE) for the proposed action. The APE is bounded by East North 16th Street to the north, North Judge Ely Boulevard to the east, East North 13th Street to the south, and Avenue F to the west. The proposed location for the MSRR covers approximately 25,000 ft² within the SERC building.

3.5.1 Cultural Background

The general cultural chronology of the region is divided by the following periods: the Paleoindian (12,000–8,500 before present [BP]); the Archaic (8,500–1,250 BP), the Late Prehistoric (1,250 BP–250 anno Domini [AD]), Protohistoric (1,600–1,800 AD), and Historic (1,800 AD to present).

3.5.2 Paleoindian Period

The Paleoindian period is generally accepted by archaeologists as falling between 12,000 BP to around 8,500 BP. The time period is characterized by small groups of highly mobile nomadic hunters following megafauna across the landscape. Tool use typically associated with the Paleoindian period consists of Clovis and Folsom points.

The Clovis culture is characteristically associated with the Paleoindian period. The Clovis were nomadic hunters who hunted big game megafauna across the landscape. The Folsom culture (10,800–10,300 BP) is closely associated with the Paleoindian period as well. Stone tool assemblages from the Clovis and Folsom are similar in style. Clovis points are large projectile points that were used to hunt megafauna. They are lanceolate shaped with short fluting notched out within the bottom half of the points. Folsom points look similar in style; however, they are thinner, more symmetrical, and have the fluting higher up within the point (Gray & Pape 2020-TN8912).

3.5.3 Archaic Period

During the Archaic period (8,500–1,250 BP), populations began to be more sedentary, relying on more crops and less megafauna for subsistence. During the Early Archaic (8,500–6,000 BP), sites were smaller and stone assemblages more varied, suggesting that the populations were still somewhat highly mobile. In contrast with the Early Archaic period, the populations increased during the Late Archaic period (4,000–1,250 BP). The archaeological record shows an increase of sites dating to around 4,500 BP, coinciding with warmer, dryer conditions. Archaic sites have been documented along the eastern and southern margins of the Edwards Plateau, south of Taylor County (Fields et al. 2005-TN8913). Tool features consistent with this period included stemmed and later barbed dart points, ground stones, and hearths with either burned stone or caliche cobbles (Gray & Pape 2020-TN8912).

Bison appeared to be a more consistent food source, as evidenced by local stone tool varieties, such as Castroville, Darl, Edgewood, Ensor, Fairland, and Nolan. Castroville, Montell, and Marcos dart points are typically considered part of bison-hunting tool kits (Fields et al. 2005-TN8913).

3.5.4 Late Prehistoric

The Late Prehistoric period consisted of the time around 1,250 BP to 200 AD. Ceramics and technology, such as the bow and arrow, were introduced during the Late Prehistoric (Gray & Pape 2020-TN8912, Fields et al. 2005-TN8913). Archaeological sites of this time period demonstrate a shift from mobility to increased sedentism. More diagnostic resources (i.e., artifacts that tell us date of use, when sites were occupied, etc.) include cord marked pottery, corner notched Scallorn points, and larger lithic tools (Gray & Pape 2020-TN8912).

Archaeological evidence across central Texas also indicates evidence of interactions with the Caddoan, Plains, and Puebloan populations across the region.

The Palo Duro cultural complex was the contemporary culture of the Late Prehistoric period. They are considered to represent foraging populations who mainly occupied the canyonlands along the Caprock Escarpment, the geographic transition point that separates the flat plains to the west and the broken and rough rolling plains to the east. The Palo Duro peoples harvested a range of wild plants and other foods, including mesquite beans and shin oak acorns (Fields et al. 2005-TN8913).

The Sam Wahl site in northern Garza County is one of the most significant sites representing the Palo Duro complex. The site contained circular pithouses, subterranean storage pits, and baking pits that contributed to the redefinition of the Palo Duro Complex.



Figure 3-1 Project Area of Potential Effect. Source ACU 2023-TN8909.

3.5.5 Protohistoric

The Protohistoric period is considered to range between 1600 and 1800 AD. Several Spanish expeditions, first by Francisco Vasquez de Coronado in 1541, later followed by Luis de Moscoso de Alvarado, documented the north central region of Texas (Cestaro et al. 2017-TN8914). After 1600, Spanish influence grew significantly within the region. The Spanish were not the only explorers in the region; the French made several expeditions across north central Texas to establish trade routes throughout (Cestaro et al. 2017-TN8914).

Tribes such as the Lipan Apaches, Jumanos, Comanches and other Indigenous groups historically occupied the north central area during the Protohistoric (Fields et al. 2005-TN8913). Tribes with ancestral ties to the project area include the Comanche, Jumanos, the Lipan Apache, and the Kickapoo Tribe (Native Land Digital 2023-TN8730). A brief discussion of each Tribe is provided below.

3.5.5.1 *Comanche*

The traditional territories of the Comanche include the territories in present Wyoming, Nebraska, Kansas, Colorado, New Mexico, Oklahoma, and Texas (Comanche Nation 2023-TN8731). The Comanche call themselves *Nəm̀ən̄n̄* (NUH-MUH-NUH), which means “The People” in their language.

Known as Lords of the Plains, the horse was an important resource in the Tribe’s culture. The Comanche were master horsemen, which was advantageous in war times. Buffalo was also important as it provided food, clothing, tepee covering, and other goods. The Tribe migrated across the Plains in the late 1600s and early 1700s, ultimately settling in southwest Oklahoma. Today, the Comanche has approximately 17,000 members. Approximately 7,000 members live in and around Lawton and Fort Sill, Oklahoma and surrounding counties near the Tribe’s headquarters outside of Lawton.

3.5.5.2 *Jumanos*

The Jumanos originated from the southern part of present Durango, Chihuahua (Mexico). They eventually migrated north, settling in New Mexico and western Texas. The Jumanos relied on farming for survival, growing corn, squash, tomatoes, chili peppers, onion, cactus pears, and potatoes (Jumano Nation 2022-TN8921). Small game was also consumed, including goat, antelope, armadillos, skunks, rabbits, birds, and fish.

The Jumanos followed buffalo herds during hunting seasons and would trade the hides at La Junta, Chihuahua. The Jumanos lived in Rancherías, large complexes where several families lived together. Rancherías were not tied to one particular family as there was no ownership of the facilities. Once a Ranchería was built, the family stayed for whatever time period was necessary. Once vacated, other Ranchería families would move in and would stay for limited durations.

In the 1600s, the Jumanos attempted to seek an alliance with the Spanish in an effort to halt Apache advances into their homelands. They asked for Christian missions to be established within their territory. Although the Spanish visited them, it does not appear that a mission was constructed (Jumano Nation 2022-TN8915). In the mid-1700s, the Jumanos tried to create an alliance with the Apache, despite once being enemies. Post 1750s, the Jumanos appeared to disappear from the historic record as a distinct Tribe. It is thought that some of their populations

were incorporated into other regional Tribes, such as the Lipan and Mescalero Apache, Caddo, and Wichita. Infectious diseases contributed to a decreased population as well.

In 2019, the Jumano Nation was recognized by the Texas Legislature (Jumano Nation 2022-TN8916). Today, the Jumano Indian Nation continues in West Texas. Some of their populations continue to live in Mexico today.

3.5.5.3 The Lipan Apache

The Lipan Apache were traditional hunters and gatherers who relied on limited agriculture for subsistence. Their name means “The Light Gray People” and commemorates the Lipan Apache’s ancient journey from Canada south to their eventual homeland of Texas (Lipan Apache Tribe 2023-TN8917).

The Lipan Apache first migrated to present Texas between 1000 and 1400 AD, searching for a homeland which contained buffalo and deer to hunt and fertile river banks where they could plant foods, such as corn and squash (Lipan Apache Tribe 2023-TN8918). Additionally, they traded buffalo and deer hides for goods, such as chili pepper, sugar, and tobacco (Lipan Apache Tribe 2023-TN8919). The Lipan Apache eventually settled in south central Texas (Lipan Apache Tribe 2023-TN8920). Following their war with the Comanches in the 1700s, the Lipan Apache expanded their homeland further south. In the 1750s, a portion of the Tribe moved to Coahuila, in Mexico.

Although the Lipan Apache signed numerous treaties in the 1800s with the United States, Spain, Mexico, and Texas, those treaties no longer exist. The Lipan Apache have survived Spanish, Mexican, and U.S. soldiers’ attempts to wipe them out. Despite this, the Lipan Apache continue to be a sovereign Tribe within Texas today, protecting their heritage, including their language, traditions, ceremonies, and sacred history (Lipan Apache Tribe 2023-TN8918).

3.5.5.4 The Kickapoo Tribe

The Kickapoo Tribe is a Woodland Tribe who were related to the Sac and Fox Nation. In the mid-18th century, the Kickapoo primarily resided in what they refer to as the “Prairie Band” along the Sangamon River in Illinois and the “Vermillion Band” off the Wabash River in Indiana. The Prairie Band eventually migrated to the then-Spanish province of Texas before the 1821 Mexican Revolution (Kickapoo Tribe of Oklahoma 2023-TN8734). The Spanish had originally given them land, but then were forcibly removed in 1839 after the Texas Revolution. The Kickapoo reestablished in Nacimientto, Mexico where the Mexican government gave them land in exchange for protecting Mexico’s northern borders. Some Kickapoo stayed in Nacimientto; others settled with the Chickasaw and Creek nations. In 1873, the Mexican Kickapoo were forced to relocate to Indian Territory.

The Kickapoo today are in McCloud, Oklahoma, with many Kickapoo residing in Lincoln and Pottawatomie counties. Some of their members live near Topeka, Kansas; Eagle Pass, Texas; and Nacimientto, Mexico (Kickapoo Tribe of Oklahoma 2023-TN8734).

3.5.5.5 Taylor County History

Taylor county was established in 1858 by the Texas Legislature. The county was named after brothers Edward, George, and James Taylor, who fought and died in the Battle of the Alamo (TCHC 2023-TN8717).

The county was largely still occupied by the Comanche until the 1870s, when European settlers began to move in (TSHA 2019-TN8720). Around 1880, the Texas and Pacific Railroad was built across Texas. The railroad contributed to the establishment of Abilene, making it a hub for shipping and connecting the area to larger markets. Buffalo Gap was the original county seat until 1883, when Abilene became the new county seat.

Post 1900s, Abilene became an agricultural community, primarily focusing on the cultivation of cotton. The cattle and poultry industries also grew during the 1900s (TSHA 2019-TN8720). Camp Barkeley was constructed in the early 1940s, first set up as a training camp for infantry and supply troops. It later transitioned to a medical replacement training center. Camp Barkeley was deactivated in 1945. After the camp closed, Dyess Air Force Base was later established in 1956 in the same location (TSHA 2019-TN8721).

In the 1960s–1970s, Taylor County prioritized industrialization, becoming home to over 140 industrial plants. Dyess Air Force Base also provided jobs to the local economy. Agriculture continues to be a primary industry for Taylor County. The county today is a transportation, financial, shopping, medical, business, and educational hub, with three universities, two community colleges, and a pharmacy school.

3.5.6 Current Abilene Christian University History

In 1903, A.B. Barret and Charles Roberson founded ACU, as it is known today. The university was originally called the Childers Classical Institute, first operating from church leader's W.H. Childers' home in town. In Fall 1906, the university officially opened its doors to 25 students (ACU 2023-TN8670 and NPS 1992-TN8714).

The school was informally known as Abilene Christian in the community during this time. Abilene Christian College became its formal name under Jesse P. Sewell's leadership as college president in 1912. Sewell oversaw the campus expansion and assisted with the school's accreditation as a junior college in 1914 and a senior college in 1919. By 1929, under a different president, the campus opened with eight buildings, including an Administration building, residence halls, an education building, dining hall, gym, auditorium, and housing for the president (ACU 2023-TN8670).

ACU continued its expansion post World War II. The school received official accreditation from the Southern Association of Colleges and Schools in 1951. Enrollment increased during the successive decades, reaching over 4000 students by 1977. Today, ACU continues to focus on strategic growth, investing in learning initiatives and technological advances that serve their students (ACU 2023-TN8670). This includes the Nuclear Energy eXperimental Testing Laboratory (NEXT Laboratory), aimed at experimenting with using molten salts instead of water as a coolant for nuclear reactors.

ACU is leading the Natura Resources Research Alliance (NRRA) consortium with the goal of designing, licensing, and commissioning the first university based MSRR. Partners include the Georgia Institute of Technology, Texas A&M University, and the University of Texas at Austin (ACU 2023-TN8671). Historic and Cultural Resources in the Area of Potential Effect

The NRC staff reviewed the THC's Texas Archaeological Sites Atlas (TASA) and Texas Historic Sites Atlas databases in April 2023 and confirmed that no previously recorded archaeological sites exist within the APE (THC 2020-TN8672). A 1-km review in the databases identified two

NRHP-listed buildings, one historic road, and one previous survey within 1 km of the APE (THC 2020-TN8672).

The two historic buildings are on the ACU campus. Luce Hall, 430 m northwest of the APE, was built in 1929 and is significant for its Classical Revival style (NPS 1992-TN8715). Immediately southeast of Luce Hall is the Abilene Christian College Administration building. It is significant under Criterion A for its association with events in local educational efforts. It has also served as ACU's main building since its construction in 1928/1929. The Administration building is also significant for its Classical Revival architecture (NPS 1992-TN8714). Both buildings were listed on the NRHP in 1992.

The one historic road is approximately 1,700 m north of the APE. The Bankhead Highway was one of the country's earliest transcontinental highways in the early 1900s. The highway stretched through Texas for over 850 mi, crossing towns such as Dallas, Fort Worth, Abilene, and El Paso, following the present routes of U.S. interstates 67 and U.S. 80 (THC 2022-TN8673).

The one cultural resources survey intersects the southeast corner of the APE. The survey was performed in 1990 for the Texas Department of Highways and Public Transportation. The survey was along the east side of the APE, adjacent to Judge Ely Blvd (TASA 2023-TN8987).

3.5.6.1.1 Original Taylor Elementary School

The original Taylor Elementary School was first established in 1955 in its present location within the now-ACU campus. The school was built during a time when Texas was desegregating its schools. It appears that this building may have been constructed during the Equalization School era, a result of the 1954 *Brown v. Board of Education of Topeka*, Kansas Supreme Court decision, which ruled that segregation in public schools was unconstitutional. Equalization schools served the purpose of educating primarily African American students as a means to continue segregation but still meet the mandate from the Supreme Court decision (NTHP 2015-TN8922). After further research, it was determined that the school district did not integrate schools until the 1962–1963 school year, when African American students enrolled in Dyess Elementary (Gallaway 1994-TN8939, Bullock 2019-TN8938).

The Taylor Elementary School was part of a general design provided to the Abilene Independent School District (AISD) by prominent architect David S. Castle. Castle's firm designed most of AISD's schools constructed between 1950 and 1955 (ARN 2018-TN8923).

Castle was based in Abilene and his firm designed many of the city's buildings between the 1910s and 1950s. Castle worked throughout West Texas, creating plans for courthouses, churches, hotels, shopping centers, movie theaters, and schools (PTH 2023-TN8924, The Grace Museum 2023-TN8925). Most of the Castle-designed buildings are still in use today. Buildings he designed, such as the Federal building and the Paramount Theater, are listed on the NRHP (NPS 1992-TN8926, NPS 1982-TN8927). After Castle's death in 1956, his son took over the firm. The business eventually closed in the early 1960s (ARN 2018-TN8923).

In 2020, AISD constructed a replacement Taylor Elementary School off of 10th street, just over 1 mi southeast of the original school. The new 95,000 ft² school opened in January 2021 (ARN 2021-TN8928, Sedalco 2023-TN8929, KTXS News 2020-TN8930). ACU purchased the original school around 2021 for its campus expansion, intending to house the theater and science departments (KTAB/KRBC News 2021-TN8931, KTXS News 2019-TN8932).

3.5.6.2 *National Historic Preservation Act Section 106 Consultation*

As part of its review of the CP application, the NRC staff initiated NHPA Section 106 consultation via letters dated May 5 and 8, 2023 with the THC [NRC 2023-TN8933]), the ACHP, and the following Tribes: Alabama-Coushatta Tribe of Texas, Apache Tribe of Oklahoma, Caddo Nation of Oklahoma, Cheyenne and Arapaho Tribes of Oklahoma, the Delaware Nation of Oklahoma, Delaware Tribe of Indians, Kickapoo Tribe of Texas, Tonkawa Tribe of Indians of Oklahoma, Wichita and Affiliated Tribes of Oklahoma, and the Ysleta del Sur Pueblo. The Caddo Nation of Oklahoma responded on May 16, 2023 (Caddo Nation 2023-TN9540) and the Kickapoo Traditional Tribe of Texas responded on May 23, 2023 (Kickapoo 2023-TN9541) declining consultation. On June 12, 2023, the Delaware Nation responded indicating that they did not have concerns with the location of the proposed action (Delaware Nation 2023-TN9542). On August 14, 2023, the Chitimacha Tribe of Louisiana responded that the location of the proposed action is not part of their aboriginal homeland (Chitimacha 2023-TN9543). The NHPA Section 106 consultation letters are listed in Attachments provided below.

The THC provided comments via email dated June 12, 2023, requesting additional information on a potential historic resource within the APE (THC 2023-TN9544). Between June and August 2023, ongoing communication occurred to understand and resolve THC's comments.

As part of the NRC staff's environmental audit, the applicant provided photographs of the original Taylor Elementary School within the APE. The property was sold to ACU in 2021. The applicant subsequently had discussions with the THC regarding potential historic properties within the APE. The THC requested images of the original Taylor Elementary School. The images were provided on August 1, 2023. The NRC staff requested a summary of the call between the applicant and the THC. After the submission of the photos to the THC, the THC provided a concurrence of no historic properties affected on August 11, 2023 (THC 2023-TN9545). On August 29, 2023, Pacific Northwest National Laboratory, on behalf of the NRC staff, met with the THC to further clarify the THC's preliminary concurrence provided to the NRC staff. The meeting clarified the confusion around the existence of the SERC building, confirmed the extent of the undertaking contained within the SERC building, and provided a better understanding of the THC's determination of no historic properties affected for the original Taylor Elementary School within the APE (THC 2023-TN9546).

The ACHP confirmed its receipt of the NRC staff's letter (NRC 2023-TN8936) on June 5, 2023, and responded on June 12, 2023 (ACHP 2023-TN9547). The ACHP mistakenly understood that the undertaking had resulted in an adverse effect. The NRC staff responded to the ACHP on September 7, 2023 (NRC 2023-TN8937) clarifying that the NRC staff was in the process of developing an environmental assessment and had not made a determination of effect related to the undertaking. To date, the ACHP has not responded to this clarification or to subsequent contact attempts within the required timeframe (36 CFR 800.6(a)(1)(iii)). As the ACHP indicates in its questions and answers regarding NHPA Section 106, if no response is received from the ACHP within the 15-day period from a submittal date, an agency can assume that the ACHP has decided against participating (ACHP 2023-TN9124).

3.5.6.3 *Environmental Impacts of Construction, Operation, and Decommissioning*

The APE for the proposed action corresponds to the approximately 15 ac parcel that surrounds the SERC building. While the undertaking is limited to whether to issue a CP for the MSRR (which would be installed within the existing SERC building), the NRC staff did not reduce the APE from that identified in the CP application.

The NRC staff consulted with 11 Tribes as part of this effort. No impacts are expected to occur on traditional cultural properties of significance as none were identified as part of this consultation.

The original Taylor Elementary School is in the southern portion of the APE. The school does not appear to be eligible under Criterion A as it does not appear to be associated with events important in history or prehistory. The school does not appear to be eligible under Criterion B as it does not have an association with people significant in our past. The school does appear to be significant under Criterion C as it was designed by the prominent local architect David S. Castle. Between the early to mid-1900s, his firm designed and built hundreds of schools, hotels, churches, courthouses, medical and municipal buildings, and recreational buildings in Abilene and across Texas. The school does not appear to be significant under Criterion D as it does not appear to have the data potential to answer questions in our history or prehistory that are not already available.

The original Taylor Elementary School building retains integrity in the areas of location, design, materials, setting, feeling, and workmanship. The building remains in its original location. In addition to the building's original form remaining intact, it also continues to resemble Castle's initial blueprints provided to the school district in the early 1950s. Additionally, the building is consistent with designs and construction methods used post World War II: a sleek one-story brick building, flat roofs, and glass block windows. The school's setting is intact as most of the features (playground, building arrangement, etc.) are extant. The school retains integrity of feeling as the property continues to convey a 1950s aesthetic and is surrounded by midcentury modern homes. However, the school does not appear to be associated with a person or event significant to Abilene and Taylor County. Because the MSRR would be installed within the existing SERC building, it does not appear that direct or indirect impacts to the original Taylor Elementary School, or any other potential historic properties, would occur.

The undertaking before the NRC is whether to issue a CP to ACU authorizing the construction of the MSRR in the SERC building. ACU would need to apply for, and receive, a separate OL from the NRC in order to operate the MSRR. Similarly, decommissioning the MSRR would require separate authorization from the NRC. Both actions would require a separate NHPA Section 106 review and consultation.

3.5.6.4 Cumulative Impacts

The description of the affected environment for the APE above serves as the baseline for the assessment of cumulative impacts on historic and cultural resources. Historic and cultural resources are nonrenewable resources; therefore, certain activities can result in a permanent loss of the resource.

Table 19.4-7 of the Preliminary Safety Analysis Report (ACU 2023-TN8909) identifies other past, present, and reasonably foreseeable future projects that could cumulatively contribute to the environmental impacts from the MSRR. A potentially eligible elementary school, the original Taylor Elementary School, is in the southern portion of the approximately 15-ac APE. The only project that may have potential cumulative impacts is Higher Ground, ACU's campus infrastructure improvement plan, which includes potential building demolition, renovation, and construction. The close proximity of these activities (within 1 mi at various locations on the ACU campus) may have direct and indirect impacts to historic properties. However, in most cases, impacts can be minimized using creative design or other Best Management Practices.

Overall, the cumulative impacts of the proposed action combined with other past, present, and reasonably foreseeable future actions is potentially moderate, but the contribution of the MSRR to those cumulative impacts would be minimal.

3.5.7 Conclusions

The MSRR would be installed within the existing SERC building. As such, it does not appear that direct or indirect impacts to historic properties would occur. Even though other projects in the area surrounding the SERC site have resulted in past impacts and may potentially result in future impacts on historic and cultural resources, the MSRR would not contribute further to those impacts. Therefore, the NRC staff concludes that the potential direct, indirect, and cumulative impacts from the proposed action on historic and cultural resources would be SMALL.

For the purposes of the NRC staff's NHPA Section 106 review, as discussed above, the undertaking of authorizing the construction of the MSRR within the existing SERC building will result in no historic properties affected, as defined in 36 CFR 800.4(d)(1). The State Historic Preservation Office concurred with this determination on August 11, 2023 (THC 2023-TN9546). No response was received from the ACHP within the 15-day period of the NRC staff's clarification of this determination.

REFERENCES

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ATTACHMENTS

AGENCIES, ORGANIZATIONS, TRIBES, AND INDIVIDUALS CONSULTED

The U.S. Nuclear Regulatory Commission (NRC) is providing electronic copies of the Abilene Christian University Molten Salt Research Reactor Environmental Assessment to the agencies, organizations, Tribes, and individuals that were consulted, as listed in Table B-1 below. The NRC will also provide electronic copies to other interested organizations and individuals upon request. The NRC staff previously shared its National Historic Preservation Act of 1966, as amended, Section 106 finding that the proposed action (authorizing the construction of the Molten Salt Research Reactor in the existing Gayle and Max Dillard Science and Engineering Research Center building on the Abilene Christian University campus in Abilene, Texas) will result in no historic properties affected with the public and shared the initial draft of this environmental assessment with this finding with Tribes, the Texas Commission on Environmental Quality, the Advisory Council on Historic Preservation, and the Texas Historical Commission for comment over a 30-day period ending on February 26, 2024. The NRC did not receive any comments.

List of Agencies, Organizations, Tribes, and Individuals Consulted

Contact	Federal and State Agencies	Address	Consultation Letter ADAMS Accession No.
M. Wolfe Caitlin Brashear	Texas Historic Commission	1511 Colorado St. Austin, TX 78701	ML23009B607 ML23241A826 ML23241A819 ML23241A831
Reid Nelson LaShavio Johnson	Advisory Council on Historic Preservation	401 F Street, NW. Suite 308 Washington, DC 20001	ML23009B614 ML23241A849
Ricky Sylestine	Alabama-Coushatta Tribe of Texas	571 State Park Road 56 Livingston, TX 77351	ML23009B617
Durell Cooper	Apache Tribe of Oklahoma	P.O. Box 1330 Anadarko, OK 73005	ML23122A284
Bobby Gonzalez	Caddo Nation of Oklahoma	NEPA Program Office USEPA Region 4 61 Forsyth Street SW Atlanta, GA 30303 long.larry@epa.gov	ML23122A281 ML23241A786
Reggie Wassana	Cheyenne and Arapaho Tribes of Oklahoma	100 Red Moon Cir. Choncho, OK 73022	ML23122A287
Teresa Patingo	Chitimacha Nation	P.O. Box 661 155 Chitimacha Loop Charenton LA 70523	ML23241A793
Debbie Dotson	Delaware Nation of Oklahoma	P.O. Box 825 Anadarko, OK 73005	ML23122A283 ML23241A814

Contact	Federal and State Agencies	Address	Consultation Letter ADAMS Accession No.
Brad Killscrow	Delaware Tribe	5100 Tuxedo Blvd Bartlesville, OK 74006	ML23122A282
Juan Garza	Kickapoo Tribe of Oklahoma	105365 OK-102 McLoud, OK 74851	ML23122A286 ML23241A817
Russell Martin	Tonkawa Tribe of Indians of Oklahoma	1 Rush Buffalo Road Tonkawa, OK 74653	ML23122A288
Terri Parton	Wichita and Affiliated Tribes of Oklahoma	P.O. Box 729 Anadarko, OK 73005	ML23122A289
E. Michael Silvas	Ysleta del Sur Pueblo	9241 Socorro Rd El Paso, TX 79907	ML23122A285
Karen Meyer	U.S. Department of Interior Fish and Wildlife Service	1505 Ferguson Lane Austin, TX 78754	ML23013A259

CHRONOLOGY OF ENVIRONMENTAL REVIEW CORRESPONDENCE

This attachment contains a chronological list of correspondence between the U.S. Nuclear Regulatory Commission (NRC) and external parties as part of its environmental review of the Abilene Christian University (ACU) Molten Salt Research Reactor construction permit application. These documents are available electronically on the NRC's website at <https://www.nrc.gov/reading-rm.html>. From this website, members of the public can gain access to the NRC's Agencywide Documents Access and Management System (ADAMS), which provides text and image files of the NRC's public documents in the Publicly Available Records component of ADAMS. The ADAMS accession numbers for each document are included below. Some of the ADAMS accession numbers below lead to a folder containing several documents. If you need assistance in accessing or searching in ADAMS, contact the Public Document Room staff at 1-800-397-4209.

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| August 12, 2022 | Letter to NRC from Russell Kruzlock, Abilene Christian University, Submitting the Construction Permit Application for the ACU Molten Salt Research Reactor (Revision 0). (Package ML22227A201) |
| October 14, 2022 | Federal Register Notice - NRC Receipt of Abilene Christian University Molten Salt Research Reactor Construction Permit Application. (87 FR 62463) |
| November 28, 2022 | Federal Register Notice - Abilene Christian University (ACU) Molten Salt Research Reactor (MSRR) Construction Permit Application Acceptance. (87 FR 73051) |
| December 16, 2022 | Letter to R. Towell, Abilene Christian University, Abilene Christian University (ACU) Molten Salt Research Reactor (MSRR) Construction Permit Application Review Schedule Letter. (ML22341A615) |
| May 5, 2023 | Letter to Brad Killscrow, Chief, Delaware Tribe of Indians, Re ACU Molten Salt Research Reactor Construction Permit Application. (ML23122A282) |
| May 5, 2023 | Letter to Russell Martin, President, Tonkawa Tribe of Indians of Oklahoma, Re ACU Molten Salt Research Reactor Construction Permit Application. (ML23122A288) |
| May 5, 2023 | Letter to Debbie Dotson, President, Delaware Nation of Oklahoma, Re ACU Molten Salt Research Reactor Construction Permit Application. (ML23122A283) |
| May 5, 2023 | Letter to Juan Garza, Chairman, Kickapoo Tribe of Texas, Re ACU Molten Salt Research Reactor Construction Permit Application. (ML23122A286) |
| May 5, 2023 | Letter to Durell Cooper, Chairman, Apache Tribe of Oklahoma, Re ACU Molten Salt Research Reactor Construction Permit Application. (ML23122A284) |

May 5, 2023 Letter to Ricky Sylestine, Chairman, Alabama-Coushatta Tribe of Texas, Re ACU Molten Salt Research Reactor Construction Permit Application. (ML23009B617)

May 5, 2023 Letter to Reggie Wassana, Governor, Cheyenne and Arapaho Tribes of Oklahoma, Re ACU Molten Salt Research Reactor Construction Permit Application. (ML23122A287)

May 5, 2023 Letter to Terri Parton, President, Wichita and Affiliated Tribes of Oklahoma, Re ACU Molten Salt Research Reactor Construction Permit Application. (ML23122A289)

May 5, 2023 Letter to Bobby Gonzalez, Chairman, Caddo Nation of Oklahoma, Re ACU Molten Salt Research Reactor Construction Permit Application. (ML23122A281)

May 5, 2023 Letter to E. Michael Silvas, Governor, Ysleta del Sur Pueblo, Re ACU Molten Salt Research Reactor Construction Permit Application. (Accession No. ML23122A285)

May 8, 2023 Letter to M. Wolfe, Texas Historic Commission, Request To Initiate Section 106 Consultation For Abilene Christian University Molten Salt Research Reactor Construction Permit Application (Docket Number: 05000610). (ML23009B607)

May 8, 2023 Letter to S. C. Bronin, Advisory Council On Historic Preservation, Request to Initiate Section 106 Consultation for Abilene Christian University Non-Power Molten Salt Research Reactor Construction Permit Review in Abilene, TX. (ML23009B614)

May 9, 2023 Letter to K. Meyers, U.S. Dept of Interior, Fish & Wildlife Service, Request To Initiate Section 7 Consultation For Abilene Christian University Molten Salt Research Reactor Construction Permit Application (Docket Number: 05000610). (ML23013A259)

May 16, 2023 Email to NRC, from Caddo Nation of Oklahoma, Response Regarding Section 106 Consultation. (ML23241A786)

May 23, 2023 Email to NRC, from Kickapoo Tribe of Oklahoma, Response Regarding Section 106 Consultation. (ML23241A817)

June 12, 2023 Letter to NRC from L. Johnson, Advisory Council On Historic Preservation, Response Regarding Section 106 Consultation. (ML23241A849)

June 12, 2023 Email to NRC from M. Wolfe, Texas Historic Commission, Response Regarding Section 106 Consultation. (ML23241A826)

June 12, 2023 Email to NRC, from Delaware Nation of Oklahoma, Response Regarding Section 106 Consultation. (ML23241A814)

August 11, 2023 Email to NRC from M. Wolfe, Texas Historic Commission, Final Response Regarding Section 106 Consultation. (ML23241A819)

August 11, 2023 Email to C Brashear, Texas Historic Commission. (ML23241A831)

August 14, 2023 Email to NRC, from Chitimacha Tribe of Louisiana, Response Regarding Section 106 Consultation. (ML23241A793)

September 27, 2023 Email to NRC, from B. Beasley, Abilene Christian University, Response Regarding Environmental Review Requests for Confirmatory Information - Closure Confirmation. (ML ML23271A020)