

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8103120399. DOC. DATE: 81/01/22 NOTARIZED: NO DOCKET #
 FACIL: 50-397 WPPSS Nuclear Project, Unit 2, Washington Public Powe. 05000397
 AUTH. NAME: AUTHOR AFFILIATION
 MATLOCK, R.G. Washington Public Power Supply System
 RECIP. NAME: RECIPIENT AFFILIATION
 ENGELKEN, R.H. Region 5, San Francisco, Office of the Director

SUBJECT: Interim deficiency rept, originally reported on 801222, re:
 thermite welding on buried svc water piping. Cause not
 stated. Testing being developed to assess effect of welding
 on base matl. Final rept will be submitted by 810501.

DISTRIBUTION CODE: B0198 COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 2
 TITLE: Construction Deficiency Report (10CFR50.55E)

NOTES: PM: 2 copies of all material.

05000397

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
ACTION:	A/D LICENSNG 04	1 1	YOUNGBLOOD, B 05	1 1
	RUSHBROOK, M. 06	1 1	LYNCH, D. 07	1 1
INTERNAL:	AD/RCI/IEI 17	1 1	ASLBP/J. HARD	1 1
	D/DIR HUM FAC15	1 1	EDO & STAFF 19	1 1
	EQUIP. QUAL BR11	1 1	HYD/GEO: BR 22	1 1
	I&E: 09	1 1	LTC QUAL BR 12	1 1
	MPA 20	1 1	NRC PDR 02	1 1
	OELD 21	1 1	PROC/TST REV 13	1 1
	QA BR 14	1 1	<u>REG FILE</u> 01	1 1
	RUTHERFORD, W. IEI	1 1	STANDRDS DEV 21	1 1
EXTERNAL:	ACRS 16	16 16	LPDR 03	1 1
	NSIC 08	1 1		

MAR 13 1981

V

MA

TOTAL NUMBER OF COPIES REQUIRED: LTR 40 40
 78 ENCL 36

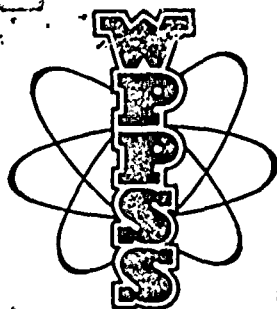
1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

1945. 1946. 1947. 1948. 1949. 1950. 1951. 1952. 1953. 1954. 1955. 1956. 1957. 1958. 1959. 1960. 1961. 1962. 1963. 1964. 1965. 1966. 1967. 1968. 1969. 1970. 1971. 1972. 1973. 1974. 1975. 1976. 1977. 1978. 1979. 1980. 1981. 1982. 1983. 1984. 1985. 1986. 1987. 1988. 1989. 1990. 1991. 1992. 1993. 1994. 1995. 1996. 1997. 1998. 1999. 2000. 2001. 2002. 2003. 2004. 2005. 2006. 2007. 2008. 2009. 2010. 2011. 2012. 2013. 2014. 2015. 2016. 2017. 2018. 2019. 2020. 2021. 2022. 2023. 2024. 2025. 2026. 2027. 2028. 2029. 2030. 2031. 2032. 2033. 2034. 2035. 2036. 2037. 2038. 2039. 2040. 2041. 2042. 2043. 2044. 2045. 2046. 2047. 2048. 2049. 2050. 2051. 2052. 2053. 2054. 2055. 2056. 2057. 2058. 2059. 2060. 2061. 2062. 2063. 2064. 2065. 2066. 2067. 2068. 2069. 2070. 2071. 2072. 2073. 2074. 2075. 2076. 2077. 2078. 2079. 2080. 2081. 2082. 2083. 2084. 2085. 2086. 2087. 2088. 2089. 2090. 2091. 2092. 2093. 2094. 2095. 2096. 2097. 2098. 2099. 2100. 2101. 2102. 2103. 2104. 2105. 2106. 2107. 2108. 2109. 2110. 2111. 2112. 2113. 2114. 2115. 2116. 2117. 2118. 2119. 2120. 2121. 2122. 2123. 2124. 2125. 2126. 2127. 2128. 2129. 2130. 2131. 2132. 2133. 2134. 2135. 2136. 2137. 2138. 2139. 2140. 2141. 2142. 2143. 2144. 2145. 2146. 2147. 2148. 2149. 2150. 2151. 2152. 2153. 2154. 2155. 2156. 2157. 2158. 2159. 2160. 2161. 2162. 2163. 2164. 2165. 2166. 2167. 2168. 2169. 2170. 2171. 2172. 2173. 2174. 2175. 2176. 2177. 2178. 2179. 2180. 2181. 2182. 2183. 2184. 2185. 2186. 2187. 2188. 2189. 2190. 2191. 2192. 2193. 2194. 2195. 2196. 2197. 2198. 2199. 2200. 2201. 2202. 2203. 2204. 2205. 2206. 2207. 2208. 2209. 2210. 2211. 2212. 2213. 2214. 2215. 2216. 2217. 2218. 2219. 2220. 2221. 2222. 2223. 2224. 2225. 2226. 2227. 2228. 2229. 2230. 2231. 2232. 2233. 2234. 2235. 2236. 2237. 2238. 2239. 2240. 2241. 2242. 2243. 2244. 2245. 2246. 2247. 2248. 2249. 2250. 2251. 2252. 2253. 2254. 2255. 2256. 2257. 2258. 2259. 2260. 2261. 2262. 2263. 2264. 2265. 2266. 2267. 2268. 2269. 2270. 2271. 2272. 2273. 2274. 2275. 2276. 2277. 2278. 2279. 2280. 2281. 2282. 2283. 2284. 2285. 2286. 2287. 2288. 2289. 2290. 2291. 2292. 2293. 2294. 2295. 2296. 2297. 2298. 2299. 2300. 2301. 2302. 2303. 2304. 2305. 2306. 2307. 2308. 2309. 2310. 2311. 2312. 2313. 2314. 2315. 2316. 2317. 2318. 2319. 2320. 2321. 2322. 2323. 2324. 2325. 2326. 2327. 2328. 2329. 2330. 2331. 2332. 2333. 2334. 2335. 2336. 2337. 2338. 2339. 2340. 2341. 2342. 2343. 2344. 2345. 2346. 2347. 2348. 2349. 2350. 2351. 2352. 2353. 2354. 2355. 2356. 2357. 2358. 2359. 2360. 2361. 2362. 2363. 2364. 2365. 2366. 2367. 2368. 2369. 2370. 2371. 2372. 2373. 2374. 2375. 2376. 2377. 2378. 2379. 2380. 2381. 2382. 2383. 2384. 2385. 2386. 2387. 2388. 2389. 2390. 2391. 2392. 2393. 2394. 2395. 2396. 2397. 2398. 2399. 2400. 2401. 2402. 2403. 2404. 2405. 2406. 2407. 2408. 2409. 2410. 2411. 2412. 2413. 2414. 2415. 2416. 2417. 2418. 2419. 2420. 2421. 2422. 2423. 2424. 2425. 2426. 2427. 2428. 2429. 2430. 2431. 2432. 2433. 2434. 2435. 2436. 2437. 2438. 2439. 2440. 2441. 2442. 2443. 2444. 2445. 2446. 2447. 2448. 2449. 2450. 2451. 2452. 2453. 2454. 2455. 2456. 2457. 2458. 2459. 2460. 2461. 2462. 2463. 2464. 2465. 2466. 2467. 2468. 2469. 2470. 2471. 2472. 2473. 2474. 2475. 2476. 2477. 2478. 2479. 2480. 2481. 2482. 2483. 2484. 2485. 2486. 2487. 2488. 2489. 2490. 2491. 2492. 2493. 2494. 2495. 2496. 2497. 2498. 2499. 2500. 2501. 2502. 2503. 2504. 2505. 2506. 2507. 2508. 2509. 2510. 2511. 2512. 2513. 2514. 2515. 2516. 2517. 2518. 2519. 2520. 2521. 2522. 2523. 2524. 2525. 2526. 2527. 2528. 2529. 2530. 2531. 2532. 2533. 2534. 2535. 2536. 2537. 2538. 2539. 2540. 2541. 2542. 2543. 2544. 2545. 2546. 2547. 2548. 2549. 2550. 2551. 2552. 2553. 2554. 2555. 2556. 2557. 2558. 2559. 2560. 2561. 2562. 2563. 2564. 2565. 2566. 2567. 2568. 2569. 2570. 2571. 2572. 2573. 2574. 2575. 2576. 2577. 2578. 2579. 2580. 2581. 2582. 2583. 2584. 2585. 2586. 2587. 2588. 2589. 2590. 2591. 2592. 2593. 2594. 2595. 2596. 2597. 2598. 2599. 2600. 2601. 2602. 2603. 2604. 2605. 2606. 2607. 2608. 2609. 2610. 2611. 2612. 2613. 2614. 2615. 2616. 2617. 2618. 2619. 2620. 2621. 2622. 2623. 2624. 2625. 2626. 26

[illegible]

865 - 1122

| DATE | TIME | LOCATION | PERSONS | REMARKS |
|------|-------|----------|---------|----------|
| 1944 | 10:00 | STATION | 1 | Arrived |
| 1944 | 10:15 | STATION | 1 | Departed |
| 1944 | 10:30 | STATION | 1 | Arrived |
| 1944 | 10:45 | STATION | 1 | Departed |
| 1944 | 11:00 | STATION | 1 | Arrived |
| 1944 | 11:15 | STATION | 1 | Departed |
| 1944 | 11:30 | STATION | 1 | Arrived |
| 1944 | 11:45 | STATION | 1 | Departed |
| 1944 | 12:00 | STATION | 1 | Arrived |
| 1944 | 12:15 | STATION | 1 | Departed |
| 1944 | 12:30 | STATION | 1 | Arrived |
| 1944 | 12:45 | STATION | 1 | Departed |
| 1944 | 13:00 | STATION | 1 | Arrived |
| 1944 | 13:15 | STATION | 1 | Departed |
| 1944 | 13:30 | STATION | 1 | Arrived |
| 1944 | 13:45 | STATION | 1 | Departed |
| 1944 | 14:00 | STATION | 1 | Arrived |
| 1944 | 14:15 | STATION | 1 | Departed |
| 1944 | 14:30 | STATION | 1 | Arrived |
| 1944 | 14:45 | STATION | 1 | Departed |
| 1944 | 15:00 | STATION | 1 | Arrived |
| 1944 | 15:15 | STATION | 1 | Departed |
| 1944 | 15:30 | STATION | 1 | Arrived |
| 1944 | 15:45 | STATION | 1 | Departed |
| 1944 | 16:00 | STATION | 1 | Arrived |
| 1944 | 16:15 | STATION | 1 | Departed |
| 1944 | 16:30 | STATION | 1 | Arrived |
| 1944 | 16:45 | STATION | 1 | Departed |
| 1944 | 17:00 | STATION | 1 | Arrived |
| 1944 | 17:15 | STATION | 1 | Departed |
| 1944 | 17:30 | STATION | 1 | Arrived |
| 1944 | 17:45 | STATION | 1 | Departed |
| 1944 | 18:00 | STATION | 1 | Arrived |
| 1944 | 18:15 | STATION | 1 | Departed |
| 1944 | 18:30 | STATION | 1 | Arrived |
| 1944 | 18:45 | STATION | 1 | Departed |
| 1944 | 19:00 | STATION | 1 | Arrived |
| 1944 | 19:15 | STATION | 1 | Departed |
| 1944 | 19:30 | STATION | 1 | Arrived |
| 1944 | 19:45 | STATION | 1 | Departed |
| 1944 | 20:00 | STATION | 1 | Arrived |
| 1944 | 20:15 | STATION | 1 | Departed |
| 1944 | 20:30 | STATION | 1 | Arrived |
| 1944 | 20:45 | STATION | 1 | Departed |
| 1944 | 21:00 | STATION | 1 | Arrived |
| 1944 | 21:15 | STATION | 1 | Departed |
| 1944 | 21:30 | STATION | 1 | Arrived |
| 1944 | 21:45 | STATION | 1 | Departed |
| 1944 | 22:00 | STATION | 1 | Arrived |
| 1944 | 22:15 | STATION | 1 | Departed |
| 1944 | 22:30 | STATION | 1 | Arrived |
| 1944 | 22:45 | STATION | 1 | Departed |
| 1944 | 23:00 | STATION | 1 | Arrived |
| 1944 | 23:15 | STATION | 1 | Departed |
| 1944 | 23:30 | STATION | 1 | Arrived |
| 1944 | 23:45 | STATION | 1 | Departed |
| 1944 | 24:00 | STATION | 1 | Arrived |



Washington Public Power Supply System
A JOINT OPERATING AGENCY

P.O. BOX 968

3000 GEO. WASHINGTON WAY

RICHLAND, WASHINGTON 99352 PHONE (509) 372-5000

January 22, 1981
G02-81-14

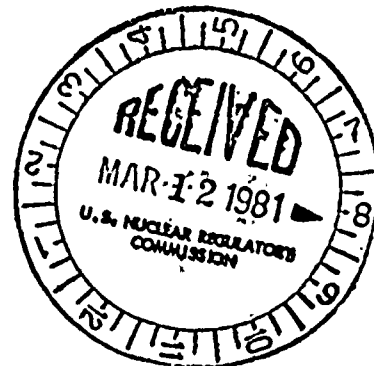
Docket No. 50-397

Nuclear Regulatory Commission
Region V
Suite 202, Walnut Creek Plaza
1990 North California Boulevard
Walnut Creek, California 94596

Attention: Mr. R. H. Engelken, Director

Gentlemen:

Subject: WPPSS NUCLEAR PROJECT NO. 2
POTENTIALLY REPORTABLE DEFICIENCY 10CFR50.55(e)
THERMITE WELDING ON BURIED STANDBY SERVICE WATER (SW) PIPE



Your staff was previously informed by telephone on December 22, 1980, of a "Potentially Reportable" 10CFR50.55(e) condition regarding the use of thermite welding to attach the cathodic protection pigtailed to ASME piping. Attached, please find the WNP-2 Project's Interim Report which identifies the approach that is being taken to resolve this condition.

It is estimated that the final report on this condition will be submitted by May 1, 1981.

Please contact us if you have additional questions.

Very truly yours,

R. G. Matlock

R. G. Matlock
Program Director, WNP-2

RGM/RPS/im

Attachment: as stated

cc: WS Chin - BPA
ND Lewis - EFSEC, Olympia
RE Snaith - B&R, NY
V. Stello - NRC

AD Toth - NRC Site
JJ Verderber - B&R, NY
E. Wood - NUS Corporation
WNP-2 Files

3019
5/11

8108120399

81-17



WASHINGTON PUBLIC POWER SUPPLY SYSTEM
DOCKET NO. 50-397 - CPPR-93

INTERIM REPORT

POTENTIALLY REPORTABLE CONDITION
WPPSS NUCLEAR PROJECT NO. 2
THERMITE WELDING ON BURIED SERVICE WATER PIPING

Statement of Problem:

Cathodic protection pigtails have been attached to the outside of buried Standby Service Water (SW) Piping, using the thermite process which is not recognized by ASME III ND (Class 3) or ASME Section IX. The effect of the thermite weld on the pipe material is unknown but could possibly cause a change in mechanical properties, create residual stresses and embrittlement or cracking.

Proposed Approach to Resolution:

A test program is being developed. Thermite welds will be made duplicating the procedure utilized by the contractor. Destructive and metallurgical tests will be preformed to assess the effect of the welding on the base material. The testing will consist of bend tests, tensile tests and metallurgical examination. Impact tests were not considered appropriate in as much as there were no impact test requirements imposed by ASME Code for this material.

The final report on this condition will be submitted by May 1, 1981, pending completion of the test program and evaluation of the test results.

