

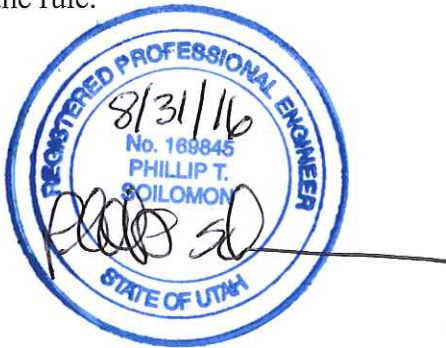
DESERET POWER COOPERATIVE BONANZA POWER FACILITY CCR UNIT CLOSURE AND POST CLOSURE PLAN

VERSION 1

PREPARED BY: DESERET POWER ENGINEERING

ENGINEERS CERTIFICATION

I certify as a registered professional engineer in the State of Utah under penalty of law that I have personally examined and am familiar with the information contained within this proposed closure plan. It is my opinion that the plan and information within is true and according to the guidelines outlined in the rule.



Phillip Solomon P.E.

I. GENERAL

In accordance with 40 CFR 257.102(b) and 257.104(d), this document contains the proposed closure plan and post-closure plan, respectively, for the Bonanza Power Plant's (Bonanza) existing coal combustion residual (CCR) units. Bonanza is operated by Deseret Generation and Transmission Cooperative (Deseret) and is located approximately 28 miles southeast of Vernal, Utah. Bonanza is a 500 MW gross coal fired steam turbine and generator with two CCR units classified as existing landfills, which contain fly ash, bottom ash, boiler slag, and flue gas desulfurization materials.

Once the use or burning of coal is discontinued at Bonanza and the two existing landfills are no longer required to receive CCR materials, the following closure plan will be implemented.

This proposed closure plan has been prepared and certified by a professional engineer (see cover page) and will be reviewed periodically to update any conditions that may arise before the actual closure.

II. CLOSURE PLAN

The CCR units to be closed and left in place will consist of one (1) fly ash and flue gas desulfurization material landfill that is estimated to contain 12.2 million cyds of material and one (1) bottom ash and boiler slag landfill that is estimated to contain 1.48 million cyds of material at the time of closure or ultimate buildout. Attachment 1 contains a site plan map showing Bonanza's CCR units along with a typical cross section of the two landfills.

No later than the date the owner initiates closure of a CCR unit, a notice will be issued by a professional engineer of the intention to close the landfill(s) and placed in the facility's operating record. The CCR landfill(s) will be graded, then capped and covered by the guidelines outlined in 40 CFR 257.102(d). The cap will consist of an installed 40 mill non-permeable membrane or 18 inches of a compacted limited permeable soil layer (no greater than 1×10^{-5} cm/sec). The placement of the 40 mill membrane shall be placed by a qualified contractor and inspected by the certifying professional engineer. If a compacted limited permeability layer is used instead of the 40 mill non-permeable membrane, soil samples will be gathered and tested for permeability by a certified lab and verified by a professional engineer that the selected soil will meet the criteria specified.

The placement of the limited permeability soil will be performed by a qualified contractor. The material will be placed in 8 to 10 inch lifts and compaction tests will be taken as per

the most current ASTM standard 698. The compaction should be greater than the 95% of the maximum density compaction value. Certifying copies of the test results will be provided to the professional engineer. Once the required depth is reached and determined to be final by the contractor, a final inspection will be performed by the certifying professional engineer.

Upon approval from the certifying engineer that the non-permeable layer has been placed and final inspection completed, a six to eight inch top soil layer will be placed. The topsoil layer shall be capable of sustaining native plant growth. The topsoil layer will be placed and compacted to a minimum of 85% of the maximum density compaction value, especially on the slopes of the landfills. The slopes of the landfills will not be less than a 3:1 (horizontal: vertical) as shown on Attachment 1. Upon completion of the topsoil layer by the contractor, the certifying professional engineer will approve and certify the final placement.

A qualified contractor will then place a U.S. Department of the Interior, Bureau of Land Management (BLM) approved seed mixture for the area to initiate vegetation growth. The vegetation will help to minimize erosion due to wind and storm water of the slopes and topsoil material. The seed mixture will be placed as per BLM and manufacturer's specifications.

The cover system will be placed ten feet beyond the base of any slope. The specified storm water and drainage systems will be maintained and part of the final grading. The estimated final total surface area to be covered is 205 acres as shown on the map contained in Attachment 1.

Upon completion of the total cover system (impermeable layer, topsoil and vegetation), the certifying professional engineer will perform a final inspection and review of soil test data. The certifying professional engineer will then issue a final completion certificate and maintained on file during post closure period.

Based on computer/forecast models and existing coal reserves, it is estimated the closure activities could be required approximately in the year 2040, but could be significantly later and/or earlier due to changes in operations and environmental regulations.

The closure activities will be completed no later than six (6) months after the CCR unit closure. The proposed schedule for closure is outlined on the attached tentative schedule of activities (see Attachment 2). The schedule includes pre-closure and post-closure activities, which include final design, bid documents and contractor selection.

II. POST CLOSURE PLAN

POST CLOSURE PLAN

Once the closure activities outline in Closure Plan have been completed and inspected by a professional engineer and certified complete, Deseret will file and record along with the property deed a notice that the two CCR units have been capped and closed within the property boundaries. This filing will initiate the Post Closure activities

Within twelve (12) months after the CCR unit closure and a property deed notification has been recorded, the following activities will be completed and documented:

1. Inspection of the CCR unit top soil cap by a certified professional engineer. The inspection will include verification of the stability, erosion control, vegetation and post closure activities of the surrounding property.
2. Inspection of the groundwater monitoring wells and or mitigation activities. Sampling of the groundwater at each monitoring well location as shown on the attached site plan.

These inspection activities will be performed every six (6) months thereafter and documented for a period of 30 years from the closure date. Any abnormal condition found during the inspections will be resolved and mitigated. The mitigation plans will be reviewed and certified by a professional engineer.

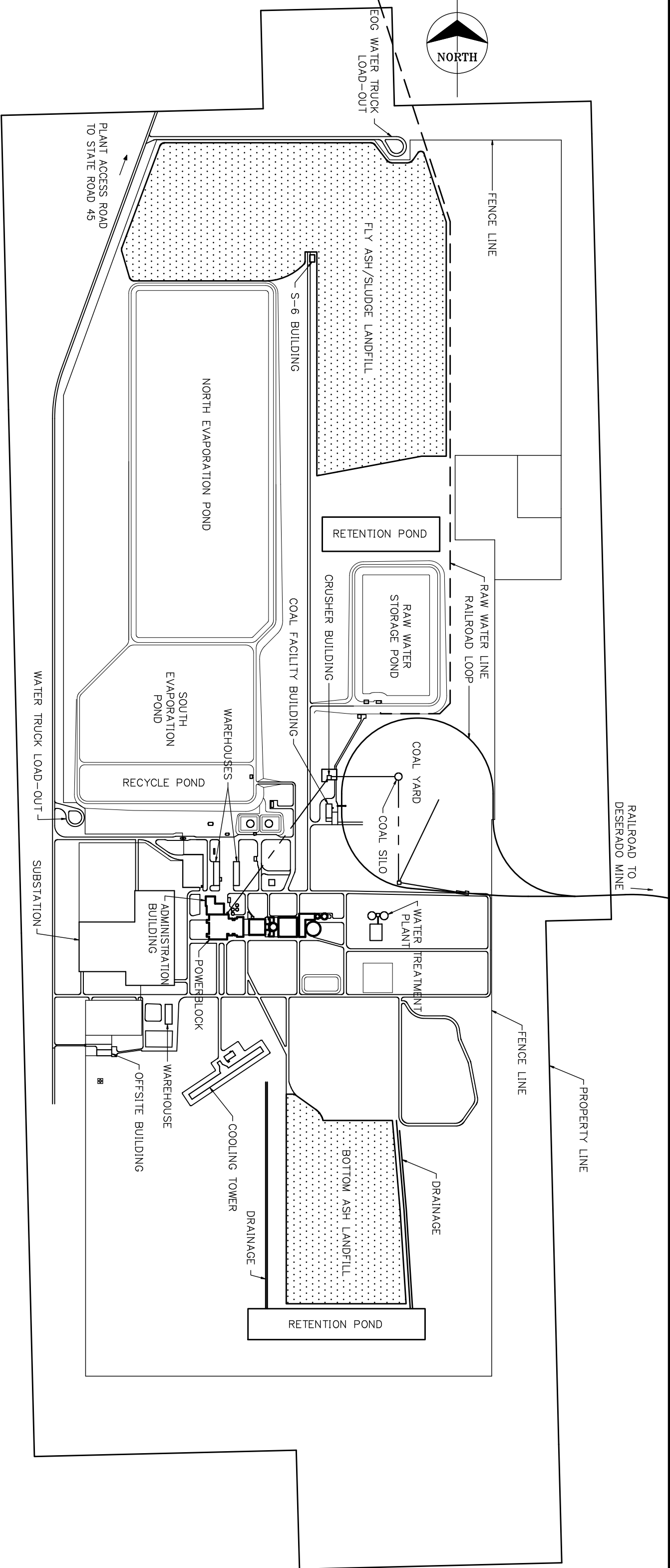
Post closure contact information will be as follows:

DESERET POWER COOPERATIVE
ATTN: ASST. VP/CHIEF ENGINEER
10714 SOUTH JORDAN GATEWAY
SOUTH JORDAN, UTAH 84095
801-618-6500
Email: info@deseretpower.com

The post closure plan for the site is planned by Deseret to remain a site for energy generation or cooperative use. Once the decision is made to discontinue the use of coal as a fuel source for generation, the closure of the CCR units will be completed and the site

converted for the use of another fuel source. The conversion to another fuel source may occur prior to the actual closure of the CCR units and/or the other fuel source may be used to generate energy in conjunction with the coal fuel source. The closed CCR units and groundwater monitoring wells will be maintained as outlined above in the post closure activities. The integrity of the closed CCR units will be maintained during the construction and operation of a new fuel source and generation facility. The property boundaries allow a lot of flexibility in the design of the conversion generation facility and allow for the CCR units to be maintained in a closed state without disturbance. A demonstration by a qualified professional engineer will be provided to the State Director and/or permit Administrator that future disturbance will not increase the potential threat to human health or the environment from the CCR units. This demonstration will be placed in the operating record and on the owner's/operators public accessible CCR Internet site

ATTACHMENT 1



Side elevation of the building. The left section is 90' wide and features a gabled roof. The right section is 300' wide and features a flat roof. The building is shown in a perspective view, with the front elevation on the left and the side elevation on the right.

TYPICAL FLY ASH/SLUDGE LANDFILL CROSS SECTION

FLY ASH/SLUDGE LANDFILL ACREAGE	
COMPLETED LANDFILL FOOTPRINT AREA (A)	142.63 ACRES
COMPLETED LANDFILL SURFACE AREA (B)	146.06 ACRES
20' PERIMETER AROUND FOOTPRINT (C)	5.79 ACRES
TOTAL FOOTPRINT AREA (A+C)	148.41 ACRES
TOTAL SURFACE AREA (B+C)	151.85 ACRES

TYPICAL BOTTOM ASH LANDFILL CROSS SECTION

BOTTOM ASH LANDFILL ACREAGE	
COMPLETED LANDFILL FOOTPRINT AREA (D)	49.66 ACRES
COMPLETED LANDFILL SURFACE AREA (E)	50.00 ACRES
20' PERIMETER AROUND FOOTPRINT (F)	2.83 ACRES
TOTAL FOOTPRINT AREA (D+F)	52.49 ACRES
TOTAL SURFACE AREA (E+F)	52.83 ACRES

					ENG	OLSEN	11/15	DRAFT	LJ	9/10	W.O. No.	
2	REVISED TO SHOW ACTUAL LANDFILL FOOTPRINT PRIOR TO OCTOBER 2015.	11/15	KBS	EO/TE	ENG	ESPLIN	11/15	DRAWN	KBS	9/10	DWG. No.	SHEET 1 OF 1
1	CREATED FROM 20100901	11/15	KBS	EO/TE	APVD			CHK	EO/TE	11/15	20151117	REV. 2
No.	REVISIONS	DATE	BY	APVD	PLOT SCALE: 1" = 1000'			APVD				

ATTACHMENT 2

ACTIVITY	MONTHS																		CLOSURE ACTIVITIES					
	PRE-CLOSURE ACTIVITIES																							
PERMITTING AND AGENCY APPROVALS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	X	X	X	X	X	X	X	X	X	X	X	X												
FINAL ENGINEERING AND BID PACKAGE PREP											X	X	X	X	X									
CONTRACT BIDS AND AWARD CONTRACT															X	X								
MOBILIZE																	X	X						
INSTALL NON-PERMEABLE BARRIER-BOTH CCR UNITS																			X	X				
ENGINEER INSPECTION																				X				
INSTALL AND GRADE TOP SOIL LAYER-BOTH UNITS																				X	X			
																					X			
ENGINEER INSPECTION																						X		
VEGETATION AND SEEDING																						X	X	
FINAL INSPECTION AND ENGINEER CERTIFICATION																								X