DEER CREEK COAL MINE
PERMIT APPLICATION
MODIFICATION TO INCLUDE
THE MEETINGHOUSE COAL LEASE (U-47979)

UTAH POWER & LIGHT COMPANY
February 15, 1983

DEER CREEK COAL MINE - MODIFICATION

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Introduction

This submittal includes the necessary information to modify the Deer Creek Coal Mine permit application for inclusion of federal coal lease U-47979. Although the permit application is in a state of administration review we feel that the information submitted is sufficient in detail to evaluate the lease as an entity.

No additional surface facilities are required excepting a breakout for ventilation located in the upper reaches of Meetinghouse Canyon. Details of this breakout are included in the Mine Plan Narrative and Sequence section of this application. The breakout is scheduled for 1986.

Enclosed are those applicable regulations requiring specific responses not covered under the permit application.

Please note that the mining plans are designed with a system of barriers for protection of the 345 KV line and stream drainage, be it perennial or intermittent.

Extraction of the coal from the new lease will be through rehabilitated entries in the Deer Creek Mine which,

due to previously mined areas, are experiencing heavier than normal pressures which results in higher maintenance costs.

With response to the apparent completeness review (A.C.R.) being prepared under separate cover, we feel it would be less confusing if this modification submittal addresses only those sections of the regulations requiring site specific answers. We plan to complete the apparent completeness review within the next 15 days.

Most of the sections of this modification have previously been addressed in the "Deer Creek Coal Mine Permit Application" submitted to the Division of Oil, Gas and Mining on March 20, 1981, and are reference to that text by section and page number.

IDENTIFICATION OF INTERESTS (UMC 782.13)

Section 1, Page 1

COMPLIANCE (UMC 782.14(a)(1)

Section 1, Page 17

VIOLATIONS THROUGH JULY 10, 1980 (UMC 782.14(c))

Section 1, Page 25

The following are additional violations to date:

NOV 81-7-1-2 issued 9/14/81 at Wilberg Mine

(1) Failure to maintain diversion abated 10/2/81.

(2) Failure to manage non-coal wastes abated 10/19/81.

Assessment conference held 5/24/82.

Final assessment paid 7/15/82.

NOV 81-6-1-2 issued 9/4/81 at Des-Bee-Dove Mine

(1) Failure to maintain sediment control measures abated 10/6/81.

(2) Failure to have records of blasting abated 10/6/81.

Finalized assessment paid 9/9/82.

NOV 81-4-7-2 issued 12/9/81 at Wilberg Mine

(1) Failure to maintain diversions abated 12/21/81 - Terminated 5/28/82.

(2) Snow removal - abated 12/21/81.

Finalized assessment paid 6/1/82.

NOV 81-4-8-2 issued 12/10/81 at Deer Creek Mine

(1) Failure to maintain surface drainage abated 12/21/81.

(2) Failure to minimize water pollution - vacated.

Proposed assessment received 1/5/82.

NOV 82-4-1-1 issued 1/22/82 for all mines

(1) Failure to report water monitoring data. Submitted 1/27/82 - Terminated 1/27/82.

Violation vacated 11/26/82.

NOV 82-4-2-1 issued 1/27/82 at Wilberg Mine

(1) Failure to minimize water pollution and erosion abated 2/23/82.

Finalized assessment paid 5/28/82.

NOV 82-1-1-1 issued 2/17/82 at Wilberg Mine

(1) Water discharge from Miller Canyon breakout abated 2/22/82.

Proposed assessment received 4/1/82, paid 1/14/83

NOV 82-1-4-2 issued 3/23/82 at Wilberg Mine

(1) Coal waste in Miller Canyon.

(2) Failure to post signs and prevent access.

Assessment paid 9/9/82.

NOV 82-2-2-2 issued 3/25/82 at Wilberg Mine

(1) Failure to maintain sediment control at the Cottonwood Portal.

(2) Failure to protect topsoil storage.

Assessment received 9/7/82 and 1/20/83.

NOV 82-4-6-1 issued 6/22/82 at Wilberg Mine

(1) Failure to maintain sediment control at fan portal road.

Proposed assessment received 7/22/82.

NOV 82-4-10-1 issued 9/20/82 at Des-Bee-Dove Mine

(1) Failure to maintain ditches and non-coal wastes.

Proposed assessment received 10/4/82.

NOV 82-4-16-1 issued 12-9-82 at Wilberg Mine

(1) Discharge at sedimentation pond.

Terminated effective 12/16/82.

Proposed assessment received 12/29/82.

Conference request 1/21/83.

NOV 83-4-1-1 issued 1/13/83 at Deer Creek Mine

(1) Surface drainage on conveyor right of way.

RIGHT OF ENTRY (UMC 782.15)

Section 1, Page 5

In addition, Federal Coal Lease U-47979 issued to Utah Power & Light Company October 6, 1981:

T16S, R7E, SLM, Utah

Sec. 34, S½NE¼, NE¼SW¼, S½SW¼, SE¼

T17S, R7E, SLM, Utah

Sec. 3, Lots 1-8, 10-12, SW¼, SW¼SE¼

Sec. 4, Lots 1, 8, 9, E½SE¼

Containing 1,063.38 acres, more or less.

The surface agency for S½NE¼, Sec. 34, T16S, R7E is the Bureau of Land Management. The remainder of the surface is in the Manti-LaSal National Forest.

AREAS UNSUITABLE FOR MINING (UMC 782.16)

Section 1, Page 18

Presently all coal lands which comprise the permit area of the Deer Creek Coal Mine are suitable for mining as they qualify for exemption under UMC 786.19 (d)(2).

Applicant has demonstrated that a financial and legal commitment was made prior to January 4, 1977 (Peabody - UP&LCO contracts for coal delivery). In addition, an updated contract with the state and federal agencies responsible for administrating the unsuitability criteria (U. S. Forest

Service, B.L.M. and State of Utah) revealed no action or petition has been initiated.

There are no known restricted areas near the permit area of the Deer Creek Mine.

PERMIT TERM (UMC 782.17)

Section 3, Page 6

Applicant is cognizant that the permit term is for five (5) years. Presently the mine which this lease proposes to be modified with is operating under a tentative permit, Deer Creek ACT/015/018a, UT-0023604.

Starting dates for mining in this lease will be as soon as approval is given to mine coal from the Division of Oil Gas and Mining with concurrence of other regulatory agencies. Schedules for mining coal are included in the mining plan and are tabulated for the life of the lease. In addition are maps showing the area to be mined on a year-by-year basis up to the five years covered under this permit term.

The lease area covers 1,063.38 acres, more or less, of which approximately 120 acres will be affected during the first five year mining plan. Complete extraction tables are available in the mine plan section of this text.

INSURANCE INFORMATION (UMC 782.18)

Section 1, Page 30

LICENSES AND PERMITS (UMC 782.19)

Section 1, Page 29

PUBLIC NOTICE & NEWSPAPER ADVERTISEMENT (UMC 782.20 782.21)

As this is a minor modification and involves no additional surface disturbance, it is our opinion that no public notice is required and request a waiver of this requirement.

MINE PLAN NARRATIVE AND SEQUENCE (UMC 783.12 (a))

The lease initially would be entered in the Blind Canyon seam, using a continuous mining five-entry system from the existing 2nd North entries in Deer Creek Mine.

This continuous mining unit would form pillars on 100 foot centers with rooms 20 feet wide in the Blind Canyon seam. This unit would advance northwards on the line of 2nd North until room for a 200 foot wide barrier pillar was made between the northern edge of the old 3rd Left section and the southern edge of this new development section.

The unit would then head due west until the Pleasant Valley Fault was located, a distance estimated at approximately 2500 feet.

On locating the fault, this five-entry development unit would then head in a northerly direction parallel to the line of the Pleasant Valley Fault. After advancing approximately 3000 feet on this line, a second continuous mining unit would be added to the area.

The second unit would advance on a three-entry 100 foot center pillar, 20 feet wide room system due east towards

the south fork of the Meetinghouse Canyon, where it would break out for a ventilation source.

On completing this work this second unit would join up with the first unit on the drive northward with five entries.

At a point approximately 3300 feet north of the three-entry easterly breakout, this second unit would then turn east towards the outcrop developing the first set of rooms for complete pillar extraction.

The first unit would continue to the arbitrary barrier line short of outcrop then turn east developing a set of rooms for complete pillar extraction skirting the outcrop.

These two continuous miner units would then sequentially develop and pillar mine rooms on a retreat system throughout the lease in the Blind Canyon seam, leaving protective barrier pillars for the ventilation entries and the high voltage power lines that cross this lease area as shown on the attached plan in the Blind Canyon seam.

The Hiawatha seam below the Blind Canyon seam only becomes a minable thickness in the area of the ventilation breakouts previously referred to. At this location it is our intention to drive slopes down from the Blind Canyon seam to the Hiawatha seam, and develop and mine this seam on a columnized support principle with one continuous miner unit, with the mining system previously described. This will be done in a manner that will ensure that the upper seam is

pillared before the lower seam, so that we maximize the coal recovery from both seams.

To the west of the Pleasant Valley fault we currently have a developing six-entry continuous miner unit, viz., 3rd North, with 100 foot center pillars and 20 foot wide rooms, driving due north, approximately 1800 feet from the western boundary of this lease U-47979. The geological information that we have researched, accumulated and developed, since starting our underground mining operations in this area, indicates that we will encounter two major down-throw faults in the northwest quadrant of this U-47979 lease. These faults will also cut across the 3rd North development entries.

When these faults are encountered, the mine plan calls for crossing these faults by driving two declining rock slopes to relocate the Blind Canyon seam initially and later on the Hiawatha seam will be located in the same manner.

On relocation of the seams, a four-entry 100 foot center pillars, 20 foot wide room development continuous mining unit will be set up to drive parallel to the faults in a northeasterly direction, until the outcrop limiting barrier is reached. This mining unit will then block out pillar mining sections to be mined sequentially from the outcrop barrier to 3rd North mains. This mining sequence will be identical except in direction to the system employed in this lease area to the east of the Pleasant Valley Fault.

This mining system is similar to that which we now employ in our 9th East and A North pillar sections in Deer Creek Mine in the Blind Canyon seam, with considerable success and high-percentage of resource recovery.

Situated in the northernmost section of this lease are approximately 150 acres of coal lands which cannot be accessed by conventional underground means from owner's property.

Bounded by faults and escarpment outcrops, this isolated parcel contains roughly 1.4 MM tons of minable coal.

Present plans are to request a lease modification from the Minerals Management Service to exclude this section from the coal lease.

In meeting MSHA ventilation standards it is required to have an additional air intake portal in Meetinghouse Canyon as shown on the mine maps. This proposed breakout would be done from within the mine and there will be no disposal of coal, rock or waste materials on the surface. These portals will not be designated as emergency escapeways and will not require any access routes in the canyon. If, in the case of an emergency which would cut off all other routes of escape and these portals were used, the personnel could make their way to the canyon floor on foot.

Each of the three portals will be approximately eight feet high and twenty feet wide with horizontal separation of

one hundred feet between centers. Each portal will be fenced to prevent entry and posted with warning signs.

The coal seams within lease U-47979 strike in a north-south direction and dip to the west at 1.3 degrees. Because of this fact, any water produced near the portal would flow downdip into the mine rather than flowing out of the mine. Some of the mining within this lease would be at elevations up to 50 feet above the breakout elevation. However, these areas of the mine are only connected with the breakout entries through a north-south entry which is located at an elevation 40 feet below the breakout elevation and will act as a sump area to collect groundwater.

MEETINGHOUSE LEASE
SECTION TIMING
BLIND CANYON SEAM

Section	Start	End
2 North	4-15-1983	2-5-1987
2N Room 1	2-5-1987	4-7-1988
2N Room 2	4-14-1988	11-21-1989
2N Room 3	11-29-1989	6-14-1991
2N Room 4	6-22-1991	9-17-1992
2N Room 5	9-24-1992	10-29-1993
2N Room 6	11-7-1993	10-12-1994
2N Room 8	10-9-2003	2-27-2004
2N Room 9	3-4-2004	9-26-2004
2N Room 10	10-3-2004	12-24-2005
2N Room 7	1-1-2006	5-20-2006
3N 1 East	1-1-1989	6-14-1990
1E Room 1	6-14-1990	10-18-1990
1E Room 2	10-25-1990	5-26-1991
1E Room 3	6-3-1991	4-15-1992
1E Room 4	4-23-1992	7-3-1993
1E Room 5	7-11-1993	1-11-1995
1E Room 6	1-19-1995	7-5-1996
1E Room 7	7-12-1996	11-12-1997
1E Room 8	11-20-1997	4-13-1999
1E Room 9	4-21-1999	2-25-2000
3N 2 East	3-2-2000	3-23-2001
2E Room 2	4-1-2001	5-1-2001

MEETINGHOUSE LEASE
SECTION TIMING
HIAWATHA SEAM

Section	Start	End
2 North	11-19-1995	8-12-1996
2N Room 1	8-12-1996	11-27-1997
2N Room 2	12-5-1997	9-10-1999
2N Room 3	9-17-1999	1-24-2001
2N Room 4	2-2-2001	3-12-2002
3N Room 5	3-20-2002	2-8-2003
2 East	5-9-2001	1-1-2002
1 East	1-8-2002	11-15-2002
1E Room 1	11-15-2002	3-11-2003
1E Room 2	3-18-2003	11-26-2003
1E Room 3	11-4-2003	7-13-2004
1E Room 4	7-20-2004	4-5-2005
1E Room 5	4-13-2005	1-5-2006
1E Room 6	1-12-2006	8-11-2006
1E Room 7	11-9-2007	4-23-2008
1E Room 8	5-1-2008	7-25-2008

MEETINGHOUSE LEASE

TONNAGE PRODUCED BY YEAR

Year	Tons
1983	37,531
1984	174,888
1985	175,279
1986	173,860
1987	183,240
1988	181,383
1989	241,419
1990	363,813
1991	366,633
1992	368,739
1993	367,133
1994	380,197
1995	368,625
1996	357,044
1997	342,606
1998	371,226
1999	274,303
2000	195,000
2001	277,898
2002	356,130
2003	363,499
2004	363,665
2005	372,686
2006	374,860
2007	331,329
2008	157,118
TOTAL	7,520,104

CULTURAL AND HISTORIC RESOURCES (UMC 783.12(b))

Section 2, Page 1

GEOLOGY DESCRIPTION (UMC 783.14)

Section 2, Page 57

GROUNDWATER INFORMATION (UMC 783.15)

Section 2, Page 67

The groundwater flow within lease U-47979 is predominantly confined to fracture systems and some limited perched aquifers possibly present within fluvial channels in the Blackhawk Formation. Mining within this lease will likely dewater these limited perched aquifers which are immediately adjacent to the coal seam but this should have little or no impact on the surface waters or hydrology.

SURFACE WATER INFORMATION (UMC 783.16)

Section 2, Page 74 and Drawing CE-10404-EM

The hydrology of the Meetinghouse lease (U-47979) area is dominantly influenced by springs located along the Roans Canyon fault graben. Several springs have been identified where these faults intersect the upper strata of the North Horn Formation, near the head of the south fork of the Meetinghouse Canyon.

Water from eight identified springs feed the south fork of Meetinghouse Canyon. In July of 1982, the cumulative discharge of these springs totaled 777 GPM with Elk Spring contributing the majority, (547 GPM) 70% of the total. By October 1982, this cumulative discharge decreased to 145 GPM.

During the winter months these springs are inaccessible but the south fork of Meetinghouse Canyon was not flowing water where it crosses the eastern lease boundary in January 1983. This agrees with the fact that the south fork of Meetinghouse Creek is an intermittent stream.

Two springs have been identified which flow into the north fork of Meetinghouse Canyon. These springs had a combined discharge of 16 GPM in July of 1982 and, during normal years, are dry in the Fall. The stream bed in the north fork of Meetinghouse Canyon is typically dry during the summer months except during storm events.

ALTERNATIVE WATER SUPPLY INFORMATION (UMC 783.17)

Although this section has been suspended by Judge Flannery, UP&L has addressed this item in Section 2, Page 88. This lease is included in our hydrological monitoring program and no springs, seeps or riparian areas have been identified with the exception of the drainage known as Meetinghouse Creek. Refer to the mining plan which affords ample protection of these waters.

CLIMATOLOGICAL INFORMATION (UMC 783.18)

Section 2, Page 89

VEGETATION INFORMATION (UMC 783.19)

Section 2, Page 91, see enclosed Drawing CE-10466-EM

FISH AND WILDLIFE RESOURCES (UMC 783.20)

Section 2, Page 115

SOIL RESOURCES (UMC 783.21)

As there are no surface operations or facilities associated with this application, this section is not applicable.

LAND USE INFORMATION (UMC 783.22)

Section 2, Page 126

PRIME FARMLAND (UMC 783.27)

Section 2, Page 129

This lease U-47979 lies on the east escarpment of East Mountain and by observation eliminates any questions as to its being possible prime farmland. Slope aspect, elevation, water and history of farming are all positive resulting in a negative determination for prime farmland.

A contact with the Soil Conservation Service in Price, Utah has indicated they would help determine soils production rates, range condition and prime farmland determination. As of this writing no information has been received.

We feel that time is of prime essence; therefore, we submit this modification with the intention of submitting the data when received.

OPERATION PLAN: MINING PROCEDURES (UMC 784.11(a))

Section 3, Page 4

EXISTING STRUCTURES (UMC 784.12)

Section 3, Page 45

RECLAMATION PLAN (UMC 784.13)

The only reclamation required as a consequence of this permit would be as a result of possible surface subsidence. Should any fractures occur the applicant will reclaim all areas disturbed as a result of mining to a land use capable of supporting the pre-mining levels of wildlife habitat. Any revegetation would be done with Forest Service concurrence. Additional reclamation plans are in Section 4 of the Deer Creek Mine Application.

PROTECTION OF HYDROLOGICAL BALANCE (UMC 784.14)

The mine plans developed for the mining of coal within lease U-47979 have been designed to minimize the impact mining has on the hydrology including both the surface and groundwater. Where mining takes place below the south fork of the Meetinghouse Canyon, the mine plan is designed to prevent subsidence, thus protecting the intermittent stream and the power line which follows the stream.

The mining of this area will likely dewater the fluvial channels which overlie the coal seam. It is expected that dewatering will have little impact on the surface waters because these water bearing fluvial channels are not considered a major source of water for the springs or streams in the area. The water flowing into these fluvial channels is from very limited recharge by meteoric waters.

POSTMINING LAND USE (UMC 784.15)

PONDS, IMPOUNDMENTS, ETC. (UMC 784.16)

Section 4, Page 14

PROTECTION OF PUBLIC PARKS AND HISTORIC PLACES (UMC 784.17)

Section 4, Page 22

RELOCATION OF PUBLIC ROADS (UMC 784.18)

Section 4, Page 23

UNDERGROUND DEVELOPMENT WASTE (UMC 784.19)

Section 3, Page 56

SUBSIDENCE CONTROL PLAN (UMC 784.20)

This section describes in further detail the applicant's design of mine plan ensuring minimal environmental impacts, specifically surface subsidence effects of the on-going Deer Creek Mine. Operation Plan describes in detail the proposed methods of coal resource extraction and mine development. Geology Description presents the detailed geological information, site specific and general, which provides an analytical base for mine plan and subsidence control design. The following subsections describe the principal factors involved in controlling subsidence impact resultant of the proposed mining operations.

Subsidence Damage Probability Survey

A survey has been conducted on that portion of East Mountain surface which could possibly be affected by the mining of coal from the Deer Creek Mine, including the Meetinghouse Canyon lease area.

It has been determined that there are renewable resources present in the area in the forms of springs, water seeps, grazing land, timber and wildlife.

The water seeps and springs are numerous and varied in nature; a few are perennial during the unfrozen months, while some dry up over the summer and some only appear in "wet" years. There should be no affects to grazing, timber or wildlife.

A survey of structures that could be affected by subsidence has been completed and is addressed in the "Mitigation of Subsidence Damage Effects" section which follows:

Mining Methods

While Utah Power & Light Company intends to minimize surface effects of subsidence by adopting, wherever practical, the longwall method of mining and mining the coal deposit as completely as possible.

The Meetinghouse Canyon lease area is bisected in a north-south direction by the Pleasant Valley Fault. The area to the west of this fault is contiguous with the other workings at Deer Creek Mine. This area will be mined by the longwall method.

The eastern half of this lease area is cut into by the south and north forks of the Meetinghouse Canyon. Because of the resulting size of this area, developing retreat longwall mining panels is not feasible. This area

then will be completely mined by continuous miners, i.e., room and pillar development to the protective barrier pillars, protecting the escarpments of the canyons that are very prominent in this lease area as the first mining sequence.

Second mining extracting these developed pillars will start on the northernmost barrier and proceed in sequence in an orderly manner to the south, forming a controlled subsidence area. The effect of this system will be similar to a very wide longwall mining panel, the total length of the lease area, and should result in a generally uniform lowering of the surface lands over this eastern half of the lease.

As this second mining progresses in the upper Blind Canyon Seam, an underground entrance by slope to the reduced area of the lower Hiawatha Seam will be effected. Columnized room and pillar development to be followed by pillar extraction identical to that described for the Blind Canyon Seam will be undertaken with expected similar subsidence results in this seam, to complete the resource extraction.

Subsidence prediction work and our own recent experience has shown the expected maximum planned and controlled subsidence will vary from 0 to 15 feet assuming that the total cumulative extraction from the two minable seams is approximately 20 feet.

Subsidence Damage Prevention Measures

The proposed mining plan has been design in such a way as to align the full extraction panels parallel to the

margin faults and joints. This alignment, with respect to jointing, will prevent the formation of irregular sawtooth subsidence cracks in the overlying surface lands.

In order to more accurately forecast the overall extent and the amount of subsidence, Utah Power is currently conducting two separate subsidence studies, similar to those done by the NCB and Abel and Gentry, in cooperation with the U. S. Bureau of Mines.

The results of these studies will develop data which, when interpolated into proven existing formulas and models, allow the particular characteristics of the overburden on East Mountain to be analyzed as to probable behavior during and after mining.

Subsidence monitoring plans have been submitted for the Deer Creek Mine and are a part of that application.

Two different and independent monitoring schemes are presently employed over the Deer Creek Mine.

A photogrammetrical subsidence monitoring plan was initiated and flown during August 1980. In addition, a site specific longwall panel (the first longwall panel being mined in the Deer Creek Mine) has been monumented and is being monitored by conventional survey methods.

Results of both monitoring systems, undoubtedly will, in the future, provide a base on which predictable subsidence can be forecasted.

Until these base line data are formulated, surface monitoring will continue. Our recent subsidence experience

with a finger outcrop where coal was mined in the upper seam from Deer Creek Mine and then later in columnized section mining in the lower seam from Wilberg Mine, has led us to leave a larger barrier pillar adjacent to the outcrop and or "burned coal" area in the mine plan for this lease area to the east of the Pleasant Valley Fault. This will ensure adequate protection of the canyon escarpments that predominately protrude into this part of the Meetinghouse Canyon lease.

Preliminary results from the Deer Creek Mine Subsidence Survey show a lowering of the monuments over the first longwall panel of up to 2.6 feet. No visible detection of this movement is discernible on the surface without the use of the surveying instrument. The maximum slope up the edge of the subsidence trough is 2.6 feet in 100 feet. While these are preliminary data, it is our belief that such a small slope will have no effect upon the growth of trees or other vegetation.

Regarding the seeps and springs, Utah Power has been actively monitoring these, together with water generated within the mines, for some three years to date and has set up an organization with the full intention of monitoring them for the next several years.

The summary of Utah Power's annual hydrological report has been submitted to the Division.

The hydrologic report indicates that mining under the seeps and springs at the depths of cover of Deer Creek Mine, up to 2,200 feet does not dry up the seep or spring. This phenomenon is most probably due to the presence of bentonitic shale layers in the overburden which swell when wet forming an impervious clay layer. This healing characteristic is expected to seal subsidence cracks to prevent downward migration of water and subsequent loss of springs and other water sources.

The Deer Creek Mine will be mining some 20 feet of total coal at average depths of 700 to 2,200 feet and both seams are workable. Therefore, it is Utah Power's belief that the seeps and springs on East Mountain will not be adversely affected.

Mitigation of Subsidence Damage Effects

Should material damage be incurred by the structures despite the planned subsidence damage prevention measures, the applicant will repair the damage caused by subsidence resulting from the applicant's activities or compensate the owners for such damage.

Any roads which are materially damaged by subsidence will be repaired and regraded to restore them to their pre-subsidence usefulness.

All structures that could effected by subsidence are surveyed and documented.

In lieu of renewable insurance covering damages to existing structures, a bond has been secured through the District Courts for that purpose.

Subsidence Control

Utah Power & Light Company will conduct the underground mining operations so as to prevent subsidence from causing material damage to the surface and to maintain the value and reasonable foreseeable use of that surface in accordance with the preceding subsidence control plan.

Public Notice

A plan will be submitted to the U. S. Forest Service which details the area in which mining is to take place and the planned date of the mining activity. It is anticipated that this report will also be made a part of the annual subsidence monitoring report provided to the regulatory authorities.

FISH AND WILDLIFE PLAN (UMC 784.21)

Section 4, Page 31

DIVERSIONS (UMC 784.22)

Non-applicable

TRANSPORTATION FACILITIES (UMC 784.24)

Section 3, Page 34

COAL PROCESSING WASTE (UMC 784.25)

Section 3, Page 39

AIR POLLUTION CONTROL PLAN (UMC 784.26)

Section 3, Page 40

EXPERIMENTAL PRACTICES (UMC 785.13)

Section 3, Page 42

ALLUVIAL VALLEY FLOORS (UMC 785.19)

Section 2, Page 130

OFFSITE SUPPORT FACILITIES (UMC 785.21)

Section 3, Page 43

IN-SITE PROCESSING (UMC 785.22)

Section 3, Page 44

PUBLIC NOTICE (UMC 786.11)

We request the Division to waive this section as the area has already met this regulation by the Deer Creek Mine submittal.

UTAH POWER & LIGHT COMPANY

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P. O. BOX 899
SALT LAKE CITY, UTAH 84110

July 18, 1983

Ms. Mary M. Boucek
State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

RE: Meetinghouse Lease Modification
Deer Creek Mine
ACT/015/018A
Folder No. 3
Emery County, Utah

Dear Mrs. Boucek:

In reply to your request of May 6, we submit the following additional information:

UMC 783.14 - Geology Description

No core samples have been taken from the Meetinghouse lease, therefore, no analyses are available.

UMC 783.25 - Cross-Sections, Maps and Plans

The attached certification is for the maps in the application.

UMC 784.11 - Operation Plan

As stated in the application, the ventilation breakouts will be opened from within the mine. There will be no portal pads or facilities on the surface.

UMC 784.13 - Reclamation Plan: General Requirements

Total surface disturbance will consist of only the three 8'x20' openings. All coal, waste and soil will be gathered and brought into the entry. Portals will be sealed as detailed in Section 4, Page 1 of the permit application. Topsoil will be distributed and sloped to match the existing surface configuration and revegetated as directed by the USFS and DOGM.

UMC 784.19 - Underground Development Waste

Underground development waste will be disposed of in the underground disposal area south of the slope, as shown on the Blind Canyon Coal Seam, Five-Year Mine Plan (CM-10396-DR, Sheet 1 of 3).

UMC - 784.20 - Subsidence Control Plan

Prior to retreat mining of this area, the applicant will establish subsidence monitoring stations over panels to be mined out which will be included as part of the annual Subsidence Monitoring Report.

Hydrology

1. The volume of water flowing into the Meetinghouse Canyon drainage is monitored as part of our hydrologic monitoring plan. However, to insure that accurate data is obtained the applicant will install a partial flume. The Division's input will be considered when selecting a location to place the flume. Monitoring of the stream will continue for several years after mining has been completed.

2. Where mining takes place below the south fork of the Meetinghouse Creek, the mine plan is designed so that no longwall panels or pillars are removed from this area, this protecting the intermittent stream and the power line from subsidence.

3. The overburden above the upper minable coal seam within the Meetinghouse lease is illustrated on the Blind Canyon seam overburden isopach map (CE-10330-EM) which is included in the applicant's response to the completeness review. The thickness of overburden along the stream channel ranges from 250 feet near the boundary of lease U-022918 (Kingston) to greater than 500 feet along the west boundary of the lease.

4. The major rock type which makes up the overburden above the Blind Canyon seam in Meetinghouse Canyon is fluvial sandstone within the Blackhawk Formation. Some minor zones of mudstone and carbonaceous mudstone are present and act as aquicludes on any surface water which percolate down through the strata. The nature of the lithology of overburden is illustrated on drilling log EM-39 included herein. The applicant has adopted

the practice of monitoring the groundwater influx in the mines. This practice will continue throughout the mining within the Meetinghouse lease.

Please advise if you should require additional information.

Yours truly,

Wm. C. McLean

for C. E. Shingleton
Director of Services
Mining and Exploration

CES:BMcQ:bb:3994
Encl.

COAL LITHOLOGIC LOG

UTAH POWER & LIGHT COMPANY

DEPT. OF MINING & EXPLORATION

Detailed log

PROJECT: EAST MOUNTAIN DRILL HOLE: EM-39

LOCATION: 1075'N, 100'E; SW 3
COLLAR ELEV.: 7925 (est)
HOLE TYPE: PLUG
PLUG INTERVAL: 0-400
CORE INTERVAL: —
TOTAL DEPTH: 400
DATE: 16 OCT. 1982
SCALE: 1" = 10'
GEOLOGIST: Semborski: Snider

GEOPHYSICAL DATA

LOG	FROM	TO
DENSITY:	190	375
H.R.D.:	150	390
E. LOG:	190	375
GAMMA:	150	390
CALIPER:		
S.P.:		

COAL SUMMARY:

SEAM	THICKNESS	INT.
BC	10.0	76.4
HIAW	4.4	

DEPTH	PLUG	CORE	GRAPHIC LOG	FORMATION NAME	LITHOLOGIC DESCRIPTION	R.Q.D.	BOX NO.	RUN NO.	% REC.	SAMPLE
150					150-170' SANDSTONE: lt brown, fine grnd, mod sorted, rnd'					
160										
170					170-180' CMS; dk gray to black					
180				BLACKHAWK FORMATION	180-186' SANDSTONE; silty					
					186-200.5' SILTSTONE: med gray, mineral in part					
200					200.5-207' LIMESTONE; silty in part					
					207-231.5' SANDSTONE; lt gray, fine to med grnd, UFS					
210										

COAL LITHOLOGIC LOG

UTAH POWER & LIGHT COMPANY

DEPT. OF MINING & EXPLORATION

PROJECT: EAST MTN

DRILL HOLE: EM-39

DEPTH	PLUG	CORE	GRAPHIC LOG	FORMATION NAME	LITHOLOGIC DESCRIPTION	R.Q.D.	BOX NO.	RUN NO.	% REC.	SAMPLE
220					207 - 231.5' SANDSTONE ; see above					
230					231.5 - 237.7' SILTSTONE : muddy					
240				BLACKHAWK	237.7 - 239.1' COAL; 1.4 BLIND CANYON bone: 237.7 - 238' ; 238.3 - 238.5 239.1 - 239.3' CMS - BONE COAL 239.3 - 239.8' COAL : 0.5' 239.8 - 240.' BONE COAL ; 0.2' 240 - 243.7' COAL : 3.7' 243.7 - 244.1' BONE COAL ; 0.4' 244.1 - 247.9' COAL : 3.8'					
250					247.9 - 253.5' MUDSTONE ; dk gray, some CMS					
260					253.5 - 324.3' SANDSTONE ; lt gray, fine grnd, well sorted, rnd					
270										
280										
290										
300										
310										

COAL LITHOLOGIC LOG

UTAH POWER & LIGHT COMPANY

DEPT. OF MINING & EXPLORATION

PROJECT: EAST MTN

DRILL HOLE: EM-39

PAGE 3 OF 3

DEPTH	PLUG	CORE	GRAPHIC LOG	FORMATION NAME	LITHOLOGIC DESCRIPTION	R.Q.D.	BOX NO.	RUN NO.	% REC.	SAMPLE
310				BLACKHAWK	253.5 - 324.3' SANDSTONE ; as above					
320					324.3 - 325.2' COAL ; 0.9' HIAWATHA					
					325.2 - 325.8' BONE COAL ; 0.6'					
					325.8 - 326.4' COAL ; 0.6'					
330					326.4 - 327.7' BONE COAL ; 1.3'					
					327.7 - 328.7' COAL ; 1.0'					
					328.7 - 336.5' MUDSTONE ; 7.8'					
					336.5 - 338' COAL ; 1.5' HIAWATHA					
340					338 - 343' MUDSTONE ; 5.0' CMS at top					
				STAR POINT	343 - 343.4' COAL ; 0.4'					
350					343.4 - 400' SANDSTONE ; lt gray, fine grnd well sorted, rnd					
					STAR POINT SS.					
360										
370										
400										

CERTIFICATION

STATE OF UTAH)
: ss
County of Salt Lake)

Except as otherwise indicated thereon, all maps, plans, and cross sections submitted with this application have been prepared under the supervision of Don A. Dewey, a registered Professional Engineer of the State of Colorado, who hereby certifies to the correctness thereof.

Don A. Dewey, P.E.
(Professional Engineer #6522)