

CDG Engineers
Architects Planners, Inc.

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SECRETARY'S OFFICE
05 APR 20 AM 8:51



April 19, 2005

Washington Utilities and Transportation Commission
Attention: Carole Washburn, Executive Secretary
1300 South Evergreen Park Drive Southwest
Olympia, Washington 98504-7250

**RE: TransAlta Rail Upgrade
Request for Waivers
CDG Project No. 05002-01**

Dear Ms. Washburn:

TransAlta Centralia Generation, LLC (TCG) is proposing a rail loop to improve coal delivery at its facility located at 913 Big Hanaford Road, Centralia, Washington 98531. So that this project may be completed in an economic fashion, TCG requests clearance waivers from the Washington Utilities and Transportation Commission (UTC) in the following areas, which are shown in the enclosed drawings.

1. Primary Ash Loadout

- Sta. 21+56.54: Vertical clearance 17'-8 17/32"
- Sta. 21+57.48: Horizontal clearance 8'-2 7/8" Left, 8'-2 17/32" Right
- Sta. 21+70.07: Vertical clearance 17'-0"
- Sta. 21+81.96: Horizontal clearance 8'-3 15/32" Left, 8'-2 13/32" Right

2. Conveyor Crossing

- Sta. 74+16.50: Vertical clearance 19' 2 3/4"

1. Primary Ash Loadout Facility

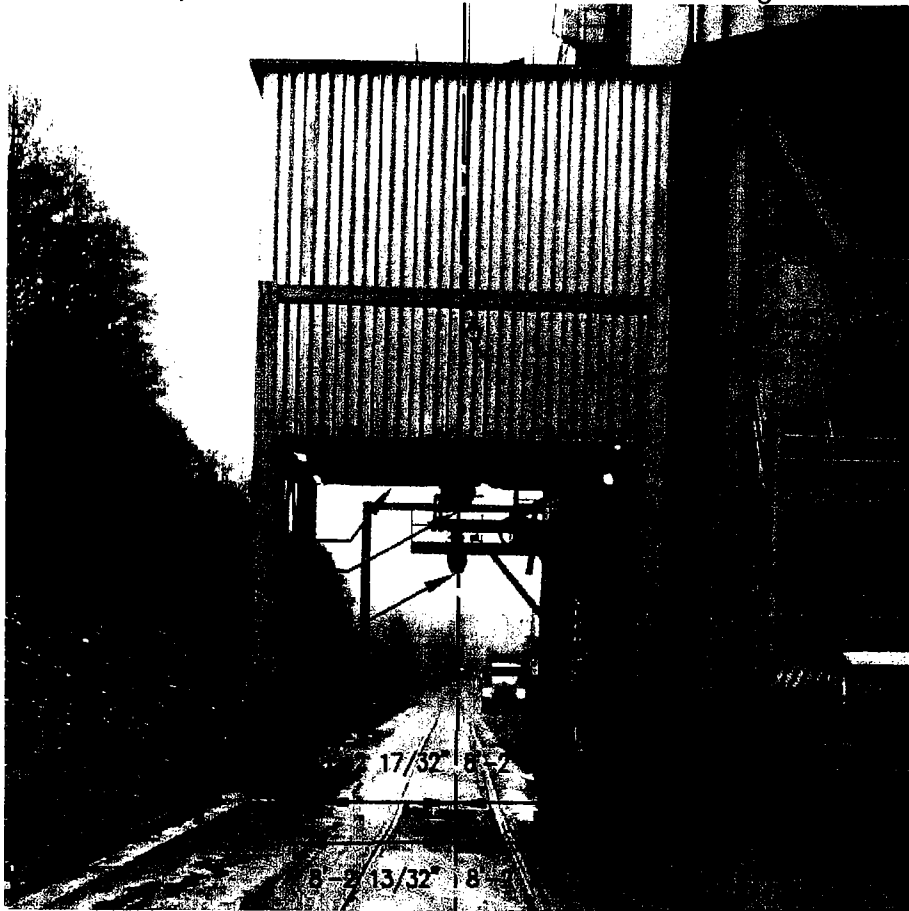
The structures in the center of the photograph below illustrate the ash loading facilities. In the foreground is the enclosure and chute at Sta. 21+70.07. As the train enters the enclosure at Sta. 21+56.54, the lower edge of the enclosure, having a clearance of 17'-8 7/8" does not meet the 18'-00" required by the State of Washington for a train traveling through a building, thus a waiver will be required. Increasing the clearance would require replacing the structure at significant cost.

The horizontal clearance required by the State of Washington when in buildings is 8'-6". There are four footings which encroach on this requirement. At Sta. 21+57.48, the horizontal clearance is 8'-2 7/8" Left (picture right) and 8'-2 17/32" Right (picture left), and at Sta. 21+81.96, horizontal clearance is limited to 8'-3 15/32" Left (picture right) and 8'-2 13/32" Right (picture left). These foundations support the enclosure around the primary ash loadout facility. Adjustment to these footings would require replacing the enclosure at significant cost. A variance will be required due to the narrow width between foundations.



The clearance under the primary loading chute at Sta. 21+07.07 is 15'-8 7/8". Again using the BNSF Locomotive Clearance Diagram (Dwg. No. 903024B) as a reference, 16'-1 15/16" is needed to clear the locomotive. The Plant is able to adjust the chute, increasing the clearance to 17'-0", sufficient to clear the locomotive, but still requiring a waiver. Adjusting the loadout to meet the State minimum requirement would require reconfiguration of the entire loadout structure.

The secondary ash loadout facility (background of picture below, Sta. 20+69.88) also presents a clearance problem, however the entire structure is being removed.



Ash Loadout Facilities, Sta. 21+70.07 foreground; Sta. 20+69.88 background.

6. Sta. 74+16.50: Vertical clearance 19' 2 3/4"

At Sta. 74+16.50, a conveyor will cross the alignment. Due to the close proximity of the tail pulley, there are limitations to the degree of vertical curvature with which the conveyor belt can withstand before displacing from the conveyor. The maximum vertical clearance achievable is 19' 2 3/4", short of the required 22'-6" required by the State of Washington for a bridge, but above the 18'-0" requirement for passage through a building. The grade on the track is set to allow for positioning of the cars at the Coal Unloading Facility, and is not able to be changed without replacing a significant length of track, two switches, and entire Coal Unloading Facility, thus we are requesting a waiver for this bridge.



The Burlington Northern Santa Fe Railway is the operating railroad, and has approved the clearances provided proper signage is installed and the Washington UTC approves. Please find enclosed for your review an overall project drawing sighting the locations of the requested waivers, a plan and profile view in each area, a sketch of the proposed conveyor overpass, and correspondence with the BNSF. Your prompt attention to this project will be greatly appreciated as this is a fast track project. If you have any questions or wish to discuss any part of the project, please feel free to call me at (314) 781-7770, x408.

Sincerely,

CDG Engineers Architects Planners, Inc.

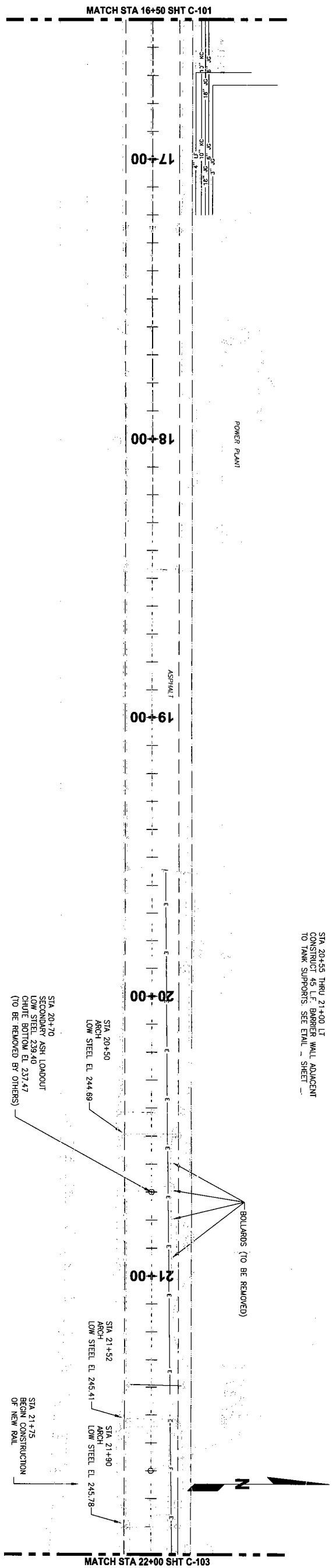
A handwritten signature in black ink, appearing to read 'Mark Birchler', is written over the typed name and title.

Mark Birchler P.E., P.L.S.
Principal

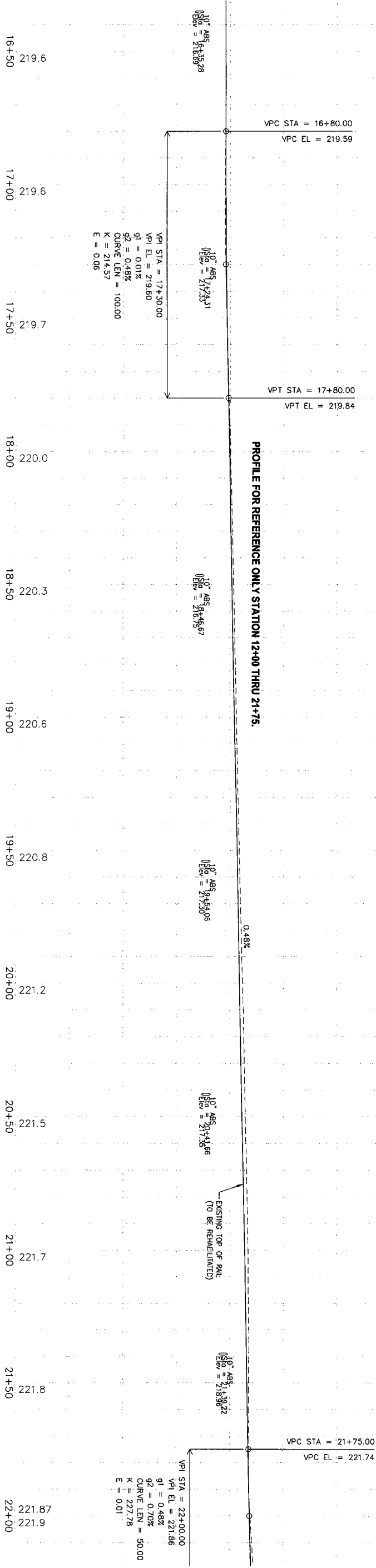
[MWB/ART]

Enclosures

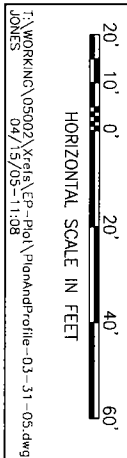
CC: Aaron Terry, CDG
John Fillion, CDG
Tony Briggs, TCG
File



GENERAL NOTES:
 1. STA 12+00 THRU 21+75
 REMOVE RAIL FROM TIES AND RAIL
 REPAIR RAIL AND ANCHOR PER BNSF SPECIFICATIONS.
 REPLACE WITH LIKE-KIND ASPHALT AS APPROVED.



PROFILE FOR REFERENCE ONLY STATION 12+00 THRU 21+75.



****PRELIMINARY****
WORK-IN-PROGRESS

THE UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM AVAILABLE INFORMATION AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NONEXISTENCE, SIZE, TYPE, NUMBER, OR LOCATION OF THESE OR OTHER UTILITIES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES SHOWN OR NOT SHOWN, AND SHALL LOCATE THE UTILITIES IN THE FIELD PRIOR TO ANY GRADING, EXCAVATION, OR CONSTRUCTION IMPROVEMENTS.

REV.	DATE	DESCRIPTION	APPROVED

PROJECT NO. **05002**
 DRAWING NO. **C-102**

TRANSALTA - CENTRALIA PLANT
RAIL FACILITIES UPGRADE
PLAN AND PROFILE
STA 16+50 THRU 22+00

DRAWN BY **LKH**
 CHECKED BY **MWB**
 SCALE **1"=20'H 1"=5'V**
 DATE **03/31/04**



CDG Engineers
 Architects Planners, Inc.
 One Campbell Plaza 59th & Arsenal Streets St. Louis, MO 63139
 TEL 314-781-7770 FAX 314-781-9075



Bruce K. Polnicky
Manager Engineering

BNSF Railway Company
2454 Occidental Ave South
Suite 1A
Seattle, WA 98134
(206) 625-6150
(206) 625-6115 -Fax

Bruce.Polnicky@bnsf.com

April 13, 2005

Mr. Will Greenough
TransAlta
913 Big Hanaford Road
Centralia, WA 98531

Dear Mr. Greenough:

We are in receipt of and have reviewed the amended partial plans and design exceptions dated March 21, 2005 and have made remarks below addressing variances requested. Note that this letter directly addresses specific variances as noted and does not serve as overall approval of the plans, which are as yet incomplete. Information received to date is by portions and the current design may change as your engineering progresses. Final BNSF engineering approval cannot be provided until a completed plan set is submitted.

We must advise that our review of the plans in no way verifies that the design is correct and complete. It is up to your engineering team to prove their design. In addition, we strongly recommend modeling be conducted to compare the train handling characteristics to this design. This is crucial to ensuring the facility will operate as desired. The modeling results must be reviewed by BNSF Railway.

Below are specific variances you submitted with comments and specific action items addressing each following the variance request. By not providing minimum clearances you will be limiting the types of rolling stock which can operate on your track and track maintenance with equipment will be restricted.

1. Secondary Ash Loadout
Sta. 20+69.88: Vertical clearance 16'-10"

Proposed clearance is not acceptable. BNSF Railway standards require 23'0" vertical clearance and Washington Statutory Regulation Chapter 480-60 calls for 22'6" vertical clearance for tracks running through a structure. If owner obtains a variance from the state, BNSF can accept a fixed vertical clearance no less than 17'0" from top of rail at this location. This restriction shall be accompanied by appropriate signage placed at both approaches to the area warning of limited clearances as required by state statute and BNSF Railway operating rules.

2. Primary Ash Loadout
Sta. 21+56.54: Vertical clearance 17'-8 17/32"

BNSF Railway standards require 23'0" vertical clearance and Washington Statutory Regulation Chapter 480-60 requires 22'6" vertical clearance for tracks running through a structure. If owner obtains a variance from the state, BNSF can accept this fixed vertical clearance at this location. This restriction shall be accompanied by appropriate signage placed at both approaches to the area warning of limited clearances as required by state statute and BNSF Railway operating rules.

Sta. 21+57.48: Horizontal clearance 8'-2 7/8" Left, 8'-2 17/32" Right

BNSF Railway standards and Washington Statutory Regulation Chapter 480-60 requires 8'6" horizontal clearance for tracks running through buildings. If owner obtains a variance from the state, BNSF can accept these fixed horizontal clearances. This restriction shall be accompanied by appropriate signage placed at both approaches to the area warning of limited clearances as required by state statute and BNSF Railway operating rules.

Sta. 21+70.07: Vertical clearance 16'-3"

Proposed clearance is not acceptable. BNSF Railway standards require 23'0" vertical clearance and Washington Statutory Regulation Chapter 480-60 calls for 22'6" vertical clearance for tracks running through a structure. If owner obtains a variance from the state, BNSF can accept a fixed vertical clearance no less than 17'0" from top of rail at this location. This restriction shall be accompanied by appropriate signage placed at both approaches to the area warning of limited clearances as required by state statute and BNSF Railway operating rules.

Sta. 21+81.96: Horizontal clearance 8'-3 15/32" Left, 8'-2 13/32" Right

BNSF Railway standards and Washington Statutory Regulation Chapter 480-60 requires 8'6" horizontal clearance for tracks running through buildings. If owner obtains a variance from the state, BNSF can accept these fixed horizontal clearances. This restriction shall be accompanied by appropriate signage placed at both approaches to the area warning of limited clearances as required by state statute and BNSF Railway operating rules.

3. Sta. 22+00 – Sta. 35+75: Grade 0.70%

BNSF Railway standards require gradient no greater than 0.5% for loop tracks. BNSF is concerned that grades in excess of 0.5% will adversely affect train handling and consequences should be verified by train modeling.

4. Sta. 31+54.59 – Sta. 39+67.89: Horizontal curve 9°30'

BNSF Railway standards require no sharper than 7 degree, 30 minute curves in loop track facilities. BNSF can accept this curvature if appropriate track structural mitigation is applied through this curve. Please submit to BNSF what mitigation will be incorporated for our review and approval.

5. Sta. 43+21.75 – Sta. 54+48.69: Horizontal curve 9°30'

BNSF Railway standards require no sharper than 7 degree, 30 minute curves in loop track facilities. BNSF can accept this curvature if appropriate track structural mitigation is applied through this curve. Please submit to BNSF what mitigation will be incorporated for our review and approval.

6. Conveyor Crossing

Sta. 74+16.50: Vertical clearance 18'-00"

BNSF Railway standards require 23'0" vertical clearance and Washington Statutory Regulation Chapter 480-60 calls for 22'6" vertical clearance. If owner obtains a variance from the state, BNSF can accept this fixed vertical clearance at this location with written confirmation that clearance under the conveyor cannot change. This restriction shall be accompanied by appropriate signage placed at both approaches to the area warning of limited clearances as required by state statute and BNSF Railway operating rules. Please submit cross-section information verifying vertical and horizontal clearance for this structure.

7. Sta. 80+69.09 – Sta. 84+20.95: Horizontal curve 9°30'

BNSF Railway standards require no sharper than 7 degree, 30 minute curves in loop track facilities. BNSF can accept this curvature if appropriate track structural mitigation is applied through this curve. Please submit to BNSF what mitigation will be incorporated for our review and approval.

In our review we observed existing facilities which will likely be directly or indirectly impacted by the proposed track alignment. These facilities include access roads, drainage, utilities and structures. We will need calculations and appropriate drawings of these areas for our review as they become available. We will be contacting you and your design team to bring attention to information that will be necessary to complete our ongoing project review and note corrections to your draft plans.

We are honored to work with you in pursuit of your project goals. Please feel free to contact myself or Mike Powrie, at (206) 625-6144 to assist with any questions you have.

Very Truly Yours,

Bruce K. Polnicky
Manager Engineering

Cc: Will Cunningham
Ron Jackson
Robert Boileau
Walter Smith
Darrell Ness
Mike Powrie



Memorandum

TO: Will Greenough
TransAlta

cc: John Fillion, CDG
Lyle Hardin, CDG

FROM: Mark Birchler
Aaron Terry
CDG Engineers

DATE: March 21, 2005

PROJECT: TransAlta Generation LLC
Rail Upgrade
Centralia Operations
CDG Project No. 05002

SUBJECT: Design Variances and Exceptions

The following are variances and design exceptions which will be required based on the design submitted to TransAlta March 11, 2004. The primary focus of this design utilizes a 0.70% grade between Sta. 20+00 and Sta. 35+75 (Design Exception No. 3), thus reducing the height of retaining structure required. The following summary lists design exceptions and variances which will be required.

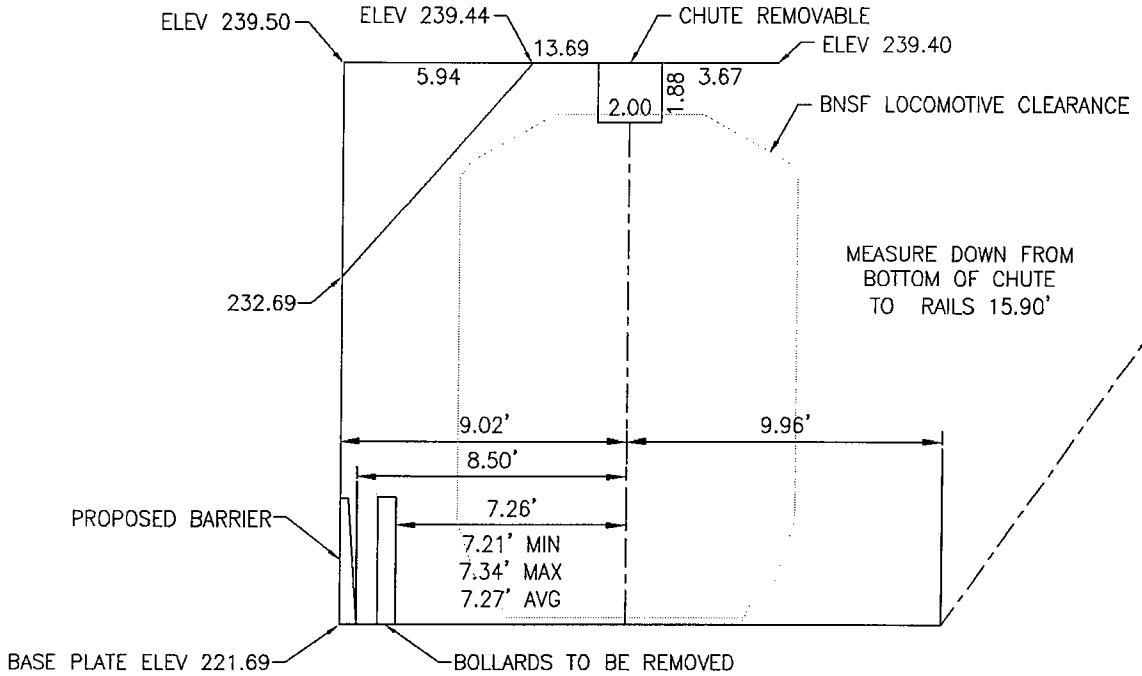
Summary of Requested Design Exceptions:

1. Secondary Ash Loadout
Sta. 20+69.88: Vertical clearance 16'-10"
2. Primary Ash Loadout
Sta. 21+56.54: Vertical clearance 17'-8 17/32"
Sta. 21+57.48: Horizontal clearance 8'-2 7/8" Left, 8'-2 17/32" Right
Sta. 21+70.07: Vertical clearance 16'-3"
Sta. 21+81.96: Horizontal clearance 8'-3 15/32" Left, 8'-2 13/32" Right
3. Sta. 22+00 – Sta. 35+75: Grade 0.70%
4. Sta. 31+54.59 – Sta. 39+67.89: Horizontal curve 9°30'
5. Sta. 43+21.75 – Sta. 54+48.69: Horizontal curve 9°30'
6. Conveyor Crossing
Sta. 74+16.50: Vertical clearance 18'-00"
7. Sta. 80+69.09 – Sta. 84+20.95: Horizontal curve 9°30'

There are seven instances in which economics will not allow the project to be complete without deviating from the standards set forth in the BNSF Guidelines for Industrial Track Projects and by the State of Washington. The following paragraphs detail each variance or design exception and the economic rationale.

1. Secondary Ash Loadout

The sketch below illustrates the first of two ash loading facilities existing at the site. The clearance under the secondary loading chute at Sta. 20+69.88 is 15'-10 13/16". Using the BNSF Locomotive Clearance Diagram (Dwg. No. 903024B) as a guide, 16'-1 15/16" is needed to clear the locomotive. The Plant is able to adjust the chute, increasing the clearance to 16'-10", sufficient to clear the locomotive, but still requiring a variance. Adjusting the loadout to meet the minimum requirement would require reconfiguration of the entire structure. The bollards shown in the sketch are for illustrative purposes only and will be removed as part of this project. A concrete barrier, the face of which will not encroach on the minimum clearance requirements, will encase and protect the supports currently protected by the bollards.



Secondary Ash Loadout

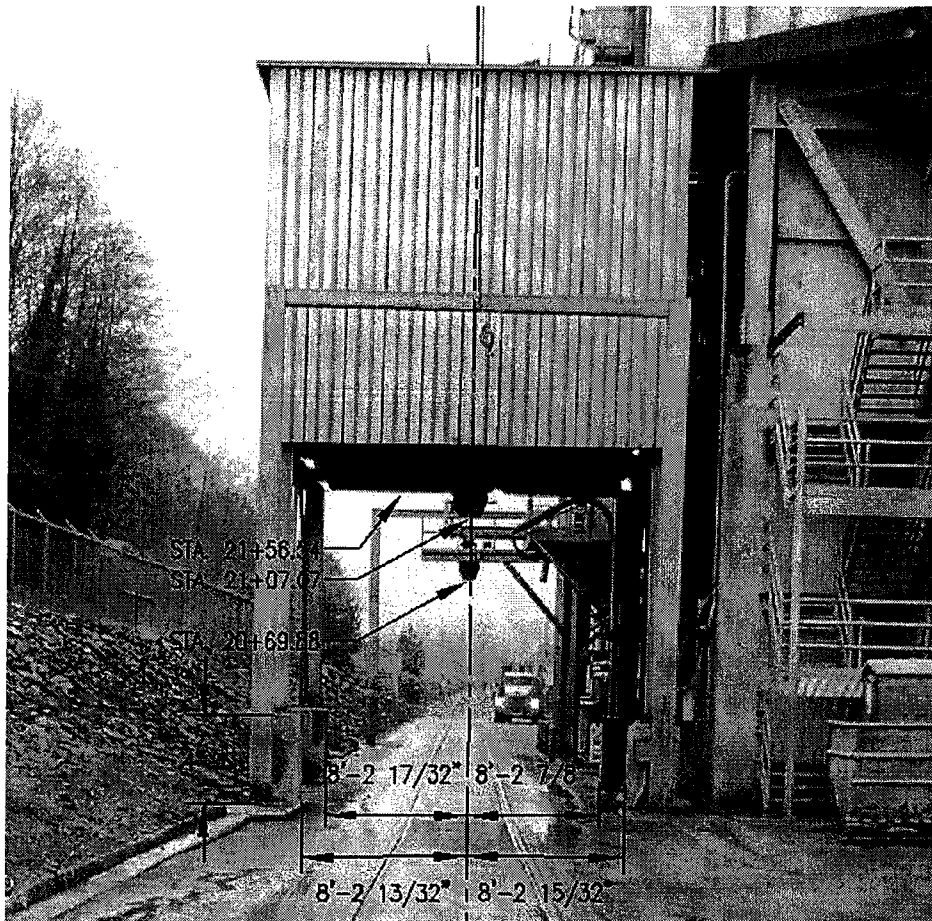
2. Primary Ash Loadout Facility

The structures in the center of the photograph below illustrate the ash loading facilities. In the foreground is the enclosure and chute at Sta. 21+70.07. As the train enters the enclosure at Sta. 21+56.54, the lower edge of the enclosure, having a clearance of 17'-8

7/8" does not meet the 18'-00" required by the State of Washington for a train traveling through a building, thus a variance will be required. Increasing the clearance would require replacing the structure at significant cost.

The horizontal clearance required by the State of Washington when in buildings is 8'-6". There are four footings which encroach on this requirement. At Sta. 21+57.48, the horizontal clearance is 8'-2 7/8" Left (picture right) and 8'-2 17/32" Right (picture left), and at Sta. 21+81.96, horizontal clearance is limited to 8'-3 15/32" Left (picture right) and 8'-2 13/32" Right (picture left). These foundations support the enclosure around the primary ash loadout facility. Adjustment to these footings would require replacing the enclosure at significant cost. A variance will be required due to the narrow width between foundations.

The clearance under the primary loading chute at Sta. 21+07.07 is 15'-8 7/8". Again using the BNSF Locomotive Clearance Diagram (Dwg. No. 903024B) as a reference, 16'-1 15/16" is needed to clear the locomotive. As is the case with the secondary ash loadout, the Plant is able to adjust the chute, increasing the clearance to 16'-3", sufficient to clear the locomotive, but still requiring a variance. Adjusting the loadout to meet the minimum requirement would require reconfiguration of the entire loadout structure.



Ash Loadout Facilities, Sta. 21+70.07 foreground; Sta. 20+69.88 background.

3. Sta. 22+00 – Sta. 35+75: Grade 0.70%

While the BNSF Guidelines state the maximum grade should be no more than 0.50%, the grade between Sta. 22+00 and Sta. 35+75 has been set to 0.70% to avoid disturbing a large retaining wall. If encountered, a costly soldier pile or similar wall would be required to replace the current wall supporting the county road to the south and the additional cut would push the ash haul road adjacent to the rail further north into a critical coal storage area. Without the coal storage to the north of the alignment, the Plant cannot blend fuel properly to fire the boiler units, resulting in an inability to operate efficiently. A design exception will be required for the section of track at 0.70%.

4. Sta. 31+54.59 – Sta. 39+67.89: Horizontal curve 9°30' (603.80' radius)

Due to the nature of the site, all fill slopes and runoff must remain on plant property. In order to meet this requirement, a 9°30' (603.80' radius) curve must be utilized between Sta. 31+54.59 and Sta. 39+67.89. The BNSF Guidelines state the maximum degree of curvature for loop facilities to be 7°30' (764.49' radius), and for standard industrial trackage, 9°30' (603.80' radius). A design exception will be required for the curve through this section of track.

5. Sta. 43+21.75 – Sta. 54+48.69: Horizontal curve 9°30' (603.80' radius)

Along the north edge of the site, there exists a major drainage channel which must be maintained from each side by equipment requiring a 20' wide path along which to travel. A 9°30' (764.49' radius) curve is required to attain this 20' path. A design exception from the BNSF standard 7°30' (764.49' radius) maximum curve is required.

6. Sta. 74+16.50: Vertical clearance 18'-00"

At Sta. 74+16.50, a conveyor will cross the alignment. Due to the close proximity of the tail pulley, there are limitations to the degree of vertical curvature with which the conveyor belt can withstand before displacing from the conveyor. The maximum vertical clearance achievable is 18'-0", short of the required 22'-6" required by the State of Washington for a bridge, but within the 18'-0" requirement for passage through a building. Without increasing the grade on the track, a variance will be required.

7. Sta. 80+69.09 – Sta. 84+20.95: Horizontal curve 9°30' (603.80' radius)

In order to tie into the existing alignment before encountering an existing turnout, the connection is made in an existing curve of 9°30' (603.80' radius) between stations 80+69.09 and 84+20.95. Adjustment would require turnout replacement which is outside of the scope of this project. This curve, although existing, will require a design exception from the BNSF standard 7°30' (764.49' radius) curve.