

**Attachment A – Application, Proposed Drawings,
Maps, and Needs Analysis**

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MU08-020
125 DWAPRIL

ID# 184245 (BD)
DATE MAR 03 2008 SC: Sensitive Information
001HQ00

TENNESSEE VALLEY AUTHORITY

LAND USE APPLICATION

XCHR-7955 SUBSTATION
XCHR-80E TRANSMISSION
LINE ESMT.

Tennessee Valley Authority (TVA) Environmental Stewardship and Policy receives several hundred requests annually for use of TVA land or landrights. Please fill out this application completely. TVA has implemented a cost recovery system so that those who benefit directly from the use of public lands reimburse TVA for its total cost. The appropriate initial payment or standard fee must be included with your application. You will be billed for any additional costs for those actions that exceed the initial payment. Please see the attached sheet *TVA Land Transaction Fees* for additional information. If you have any questions, please call your local TVA Environmental Stewardship and Policy Watershed Team.

TVA OFFICIAL USE ONLY XCHR7955 + XCHR-80E
 RLR No.: 184245 Tract No. Assigned by Realty: (CHR-414)

<p>1. Name and Mailing Address of Applicant:</p> <p>Blue Ridge Mountain Electric Membership Cooperative; Attention: Mr. Joe Satterfield P.O. Box 9, 1360 Main Street Young Harris, Georgia 30582</p> <p>Home Telephone No.: _____ Office Telephone No.: 800 292 6456 E-Mail Address: _____ SSN or Federal ID No.: _____</p>	<p>2. Name, Address, and Title of Authorized Agent: (i.e., builder, engineer.) Include a letter confirming your authorization.</p> <p>_____ _____ _____</p> <p>Home Telephone No.: _____ Office Telephone No.: _____</p>
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<p>3. Location: <i>Attach a location map and a map showing boundaries of TVA land needed.</i></p> <p>Subdivision: n/a - TVA Tract CHR-414</p> <p>Subdivision Plat Lot No.: _____ Tax Map & Parcel No.: _____ Reservoir: Chatuge River: Hiwassee River Mile: 129.9R</p>	<p>4. Type of Land Use Required: <i>Please call your local TVA Environmental Stewardship and Policy Team (WT) to help us determine the appropriate TVA action needed.</i></p> <table style="width: 100%;"> <tr> <td style="vertical-align: top;"> <p>Approval by TVA WT:</p> <p><input type="checkbox"/> Land Use Permit <input type="checkbox"/> License Agreement <input type="checkbox"/> Sufferance Agreement (Complete page 1 only)</p> </td> <td style="vertical-align: top;"> <p>Approval by TVA Board:</p> <p><input checked="" type="checkbox"/> Easement + FEESALE <input type="checkbox"/> Deed Modification <input type="checkbox"/> Lease (____ years needed) <input type="checkbox"/> Abandonment <input type="checkbox"/> Land Transfer</p> </td> </tr> </table>	<p>Approval by TVA WT:</p> <p><input type="checkbox"/> Land Use Permit <input type="checkbox"/> License Agreement <input type="checkbox"/> Sufferance Agreement (Complete page 1 only)</p>	<p>Approval by TVA Board:</p> <p><input checked="" type="checkbox"/> Easement + FEESALE <input type="checkbox"/> Deed Modification <input type="checkbox"/> Lease (____ years needed) <input type="checkbox"/> Abandonment <input type="checkbox"/> Land Transfer</p>
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5. Proposed Time Schedule for your Project:
 Start Date: _____ Projected Completion Date: _____

6. Describe your project, its purpose and intended use:
 Describe the proposed development, on or off TVA land. Include a general description of proposed structures to be erected and land disturbance including vegetation removal, fills or excavations. Attach a copy of detailed plans as appropriate.
 Development of substation site for electric distribution purposes. Please see attached description.

7. Will federal assistance be used as part of this project?
 Yes No If yes, describe activity and complete Applicant Information Pre-Award Form.

8. Authorization for TVA to process your application:
 Application is hereby made for approval of the land use described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. By submitting this request, I understand credit checks will be performed as part of the normal business procedure. Additional financial information may be requested.

PAYMENT TERMS: Payment for Land Transaction Fees and any related costs are due Net thirty (30) days from the date of invoice. On any overdue payment, TVA shall charge interest at the rate payable by TVA under the United States Prompt Payment Act (31 U.S.C. §§3901-3906), from the date payment is due until the date TVA receives payment. Payment of interest shall be due within thirty (30) days after TVA's invoice for such interest is dated.

Failure by the Customer to pay all invoices within sixty (60) days will result in termination of the request.

8. Authorization (continued)

I understand TVA charges a standard fee for minor land actions, and that full cost recovery is required for all other actions. I understand and agree to pay all of TVA's costs associated with the processing of this application. Upon receipt of a complete application and standard fee or initial processing fee, TVA will initiate the review of the request. Upon completion of the draft instrument, a standard closing cost fee of \$800.00 will be assessed for deed execution, mailing, and filing. Payment of any fee does not guarantee TVA approval. TVA may impose terms and conditions at the time of the approval. The processing fees are in addition to any payment required for the purchase or use of the TVA land. Any unused portion of the processing fee will be refunded. I understand TVA will invoice me monthly when costs exceed the initial processing fee.

3-3-08

Date

De Ketterfill

Signature of Applicant

9. Anticipated Economic Impacts of your Project:

A. Projected cost estimate and funding source (if project is to be completed in phases, please include time schedule and costs for each phase):

B. Number of jobs to be created - Near - Term (including construction) _____
 Long - Term _____

C. Negative socioeconomic impacts considered:

D. Expected public and investor benefits:

10. Describe Anticipated Environmental Impacts: (Include copies of reviews, assessments, or letters from federal or state agencies)

11. Alternative Site(s) Considered: (Include justification for rejecting alternate locations; attach explanation if needed)

12. List all permits, approvals, or certifications required by other federal, state, or local agencies:
 (Include those required for any structure, construction activity, discharge or other activities described in this application)

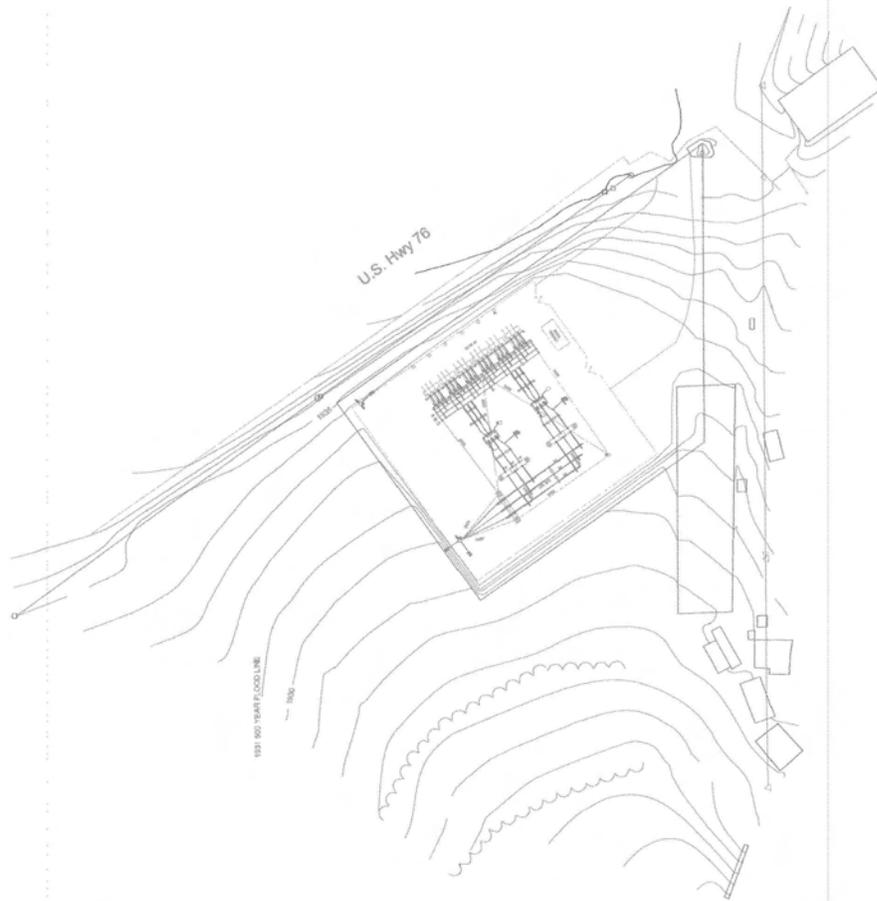
Issuing Agency	Type Approval	Identification Number	Date of Application	Date of Approval

13. Has any agency denied approval for the project described herein or any activity related to the project?

No Yes (If "Yes", attach explanation)

<p>A complete request should include:</p> <ol style="list-style-type: none"> This completed application form and a check or money order with Social Security Number or Federal ID Number on the check made payable to "TVA" for the appropriate land transaction fee. A location map indicating the area of TVA land or landrights affected by the project. Drawing(s) or plan(s) of any proposed construction activity or development which would result if land or landrights are granted. Other documents as available (surveys, environmental documents, etc.). 	<p>FOR TVA USE ONLY</p> <p><u>MAR 03 2008</u> Date Application Received</p> <p><u>4/15/2008</u> Date Application Complete</p> <p><i>Angela B. Sun</i> Team Manager</p> <p><u>DBT</u> Initials</p> <p><i>DBT</i> Initials</p>
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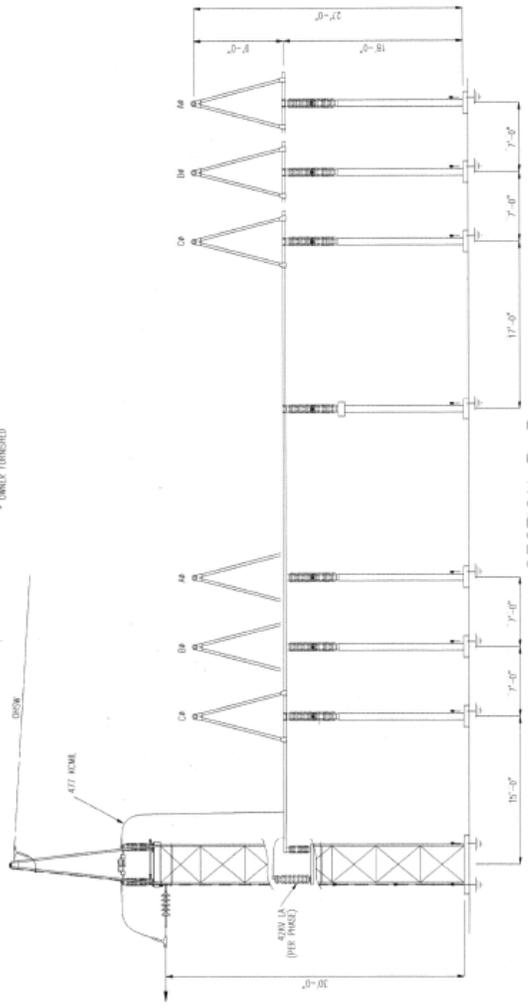
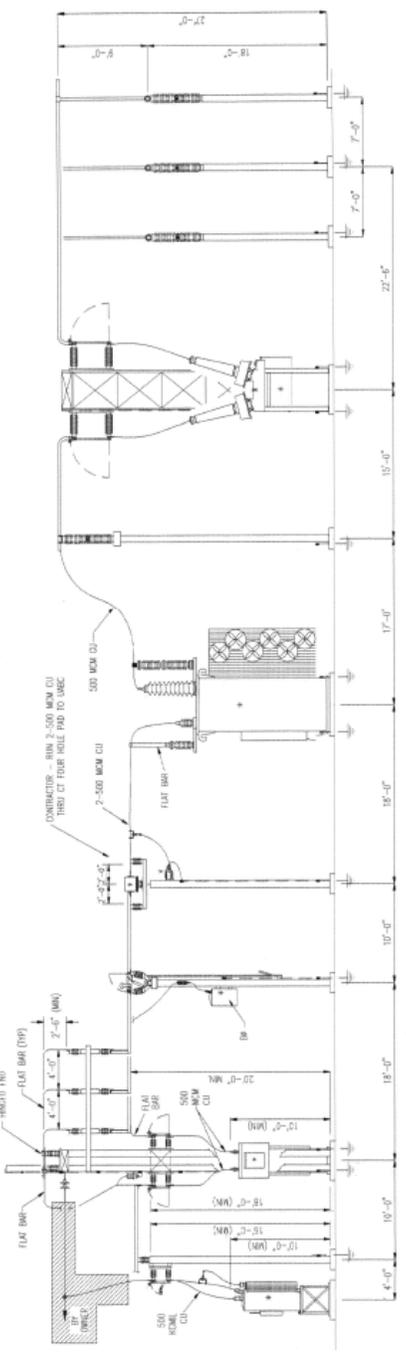
NO.	DATE	BY	REVISION	MACE DONIA SUBSTATION YOUNG HARRIS, GEORGIA	DATE 03-25-08	SCALE 1" = 30'	DRAWING NO. CB1MA011	PATTERNSON & DEWAR ENGINEERS, INC. 505 CENTER ROAD MARIETTA, GEORGIA 30067 PHONE: (770) 433-1410 ENGINEERS - SURVEYORS	PROJECT NO. CB1MA011	SHEET 2
					TITLE SITE PLAN					

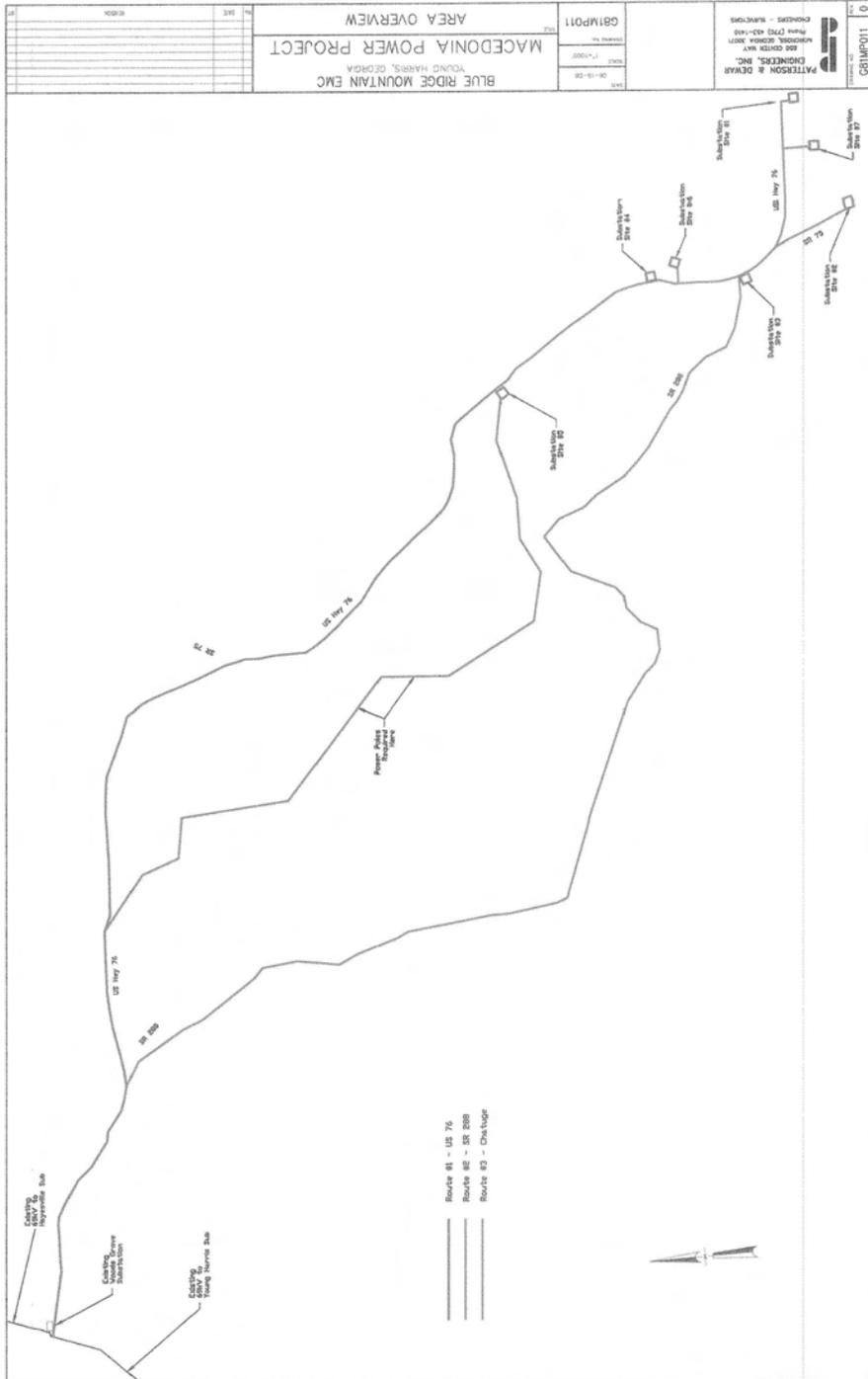


DATE	05-05-08	SCALE	2 1/8" = 1'
DRAWN BY	CB1MA111	TITLE	STRUCTURE VIEWS
CHECKED BY		BLUE RIDGE MOUNTAIN ELECTRIC MEMBERSHIP CORPORATION YOUNG HARRIS, GEORGIA	
REVISION			


PATTERSON & DEWAR
ENGINEERS, INC.
 4105 GLENDALE BLVD.
 MONROE, LOUISIANA 70501
 PHONE (713) 463-1413
 FACSIMILE (713) 463-1414
 ENGINEERS - SURVEYORS

FOR BID PURPOSES ONLY
NOT FOR CONSTRUCTION





Blue Ridge Mountain EMC

Macedonia Substation

Why consider a new substation in Towns County

1. **Current load at Woodsgrove Substation is above Firm capacity**
The firm capacity of Woods Grove is 20 MW. Max capacity is 40MW
The load reached 32.4 MW January 3, 2008
2. **All load possible has been moved to other stations**
Young Harris substation feeds the area near the Hwy 69 junction
Hayesville substation feeds Hwy 69 and Crooked creek
3. **Line losses of (\$102,921) per year verses (\$39,375) per year**
4. **Reliability for 8328 customers**
We have no backup for a serious Failure at Woodsgrove Sub

Substations Transformer capacity as of 2007

Substation	Firm Capacity	Max Capacity	Date
Blairsville 13 Kv	10 MW	10 MW	
Blairsville 25 Kv	24 MW	24 MW	
Nottely 25 Kv	24 MW	24 MW	1971
Woodsgrove 25 Kv	20 MW	40 MW	1965
Young Harris 25 Kv	20 MW	40 MW	05-99
Young Cane 25 Kv	42 MW	84 MW	05-01
Ranger 25 Kv	42 MW	84 MW	10-05
Hayesville 25 Kv	42 MW	84 MW	06-07
Total Substation	<u>224 MW</u>	<u>390 MW</u>	



PATTERSON & DEWAR ENGINEERS, INC.

P.O. BOX 2808 • NORCROSS, GEORGIA 30091
850 CENTER WAY • NORCROSS, GEORGIA 30071
770-453-1410 • FAX 770-453-1411

March 17, 2008

Mr. Chris Kelley
Blue Ridge Mountain E.M.C.
1360 Main Street
Young Harris, GA 30582

Chris,

A new computer analysis of the future 2008 system was generated with the new Macedonia substation. The combined distribution losses for Woods Grove and Macedonia substations are estimated at \$39,375 per year. For comparison purposes, with the same load served only by Woods Grove substation, the estimated distribution losses are \$102,921 per year.

If you have any questions, feel free to contact me.

Sincerely,

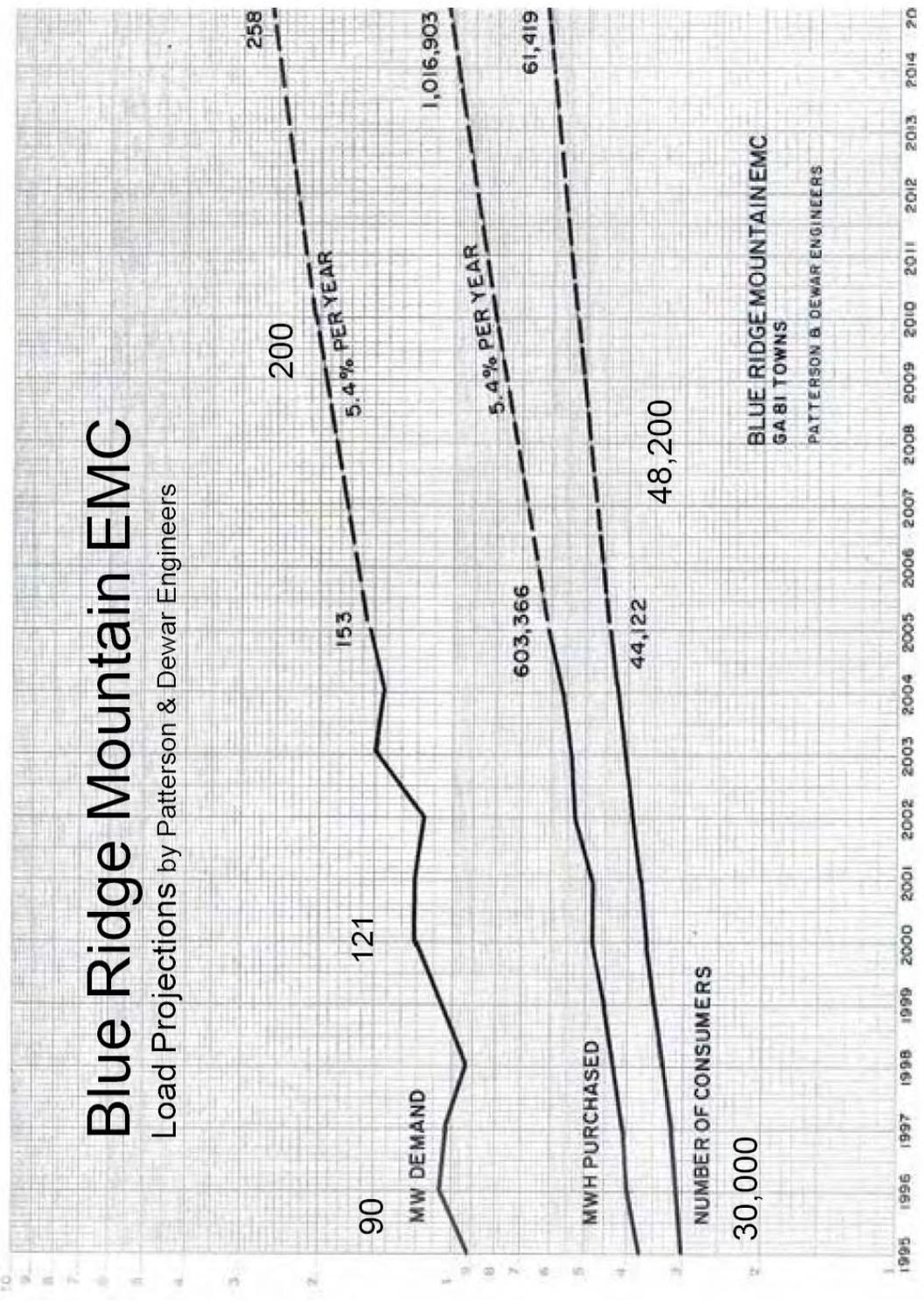
Dane Tyler

cc: Mr. Joe Satterfield, General Manager, BRMEMC
Mr. Layne Jordan, Client Engineer, P&D

PROVIDING EXCELLENCE IN ENGINEERING AND SURVEYING FOR OVER 60 YEARS

Blue Ridge Mountain EMC

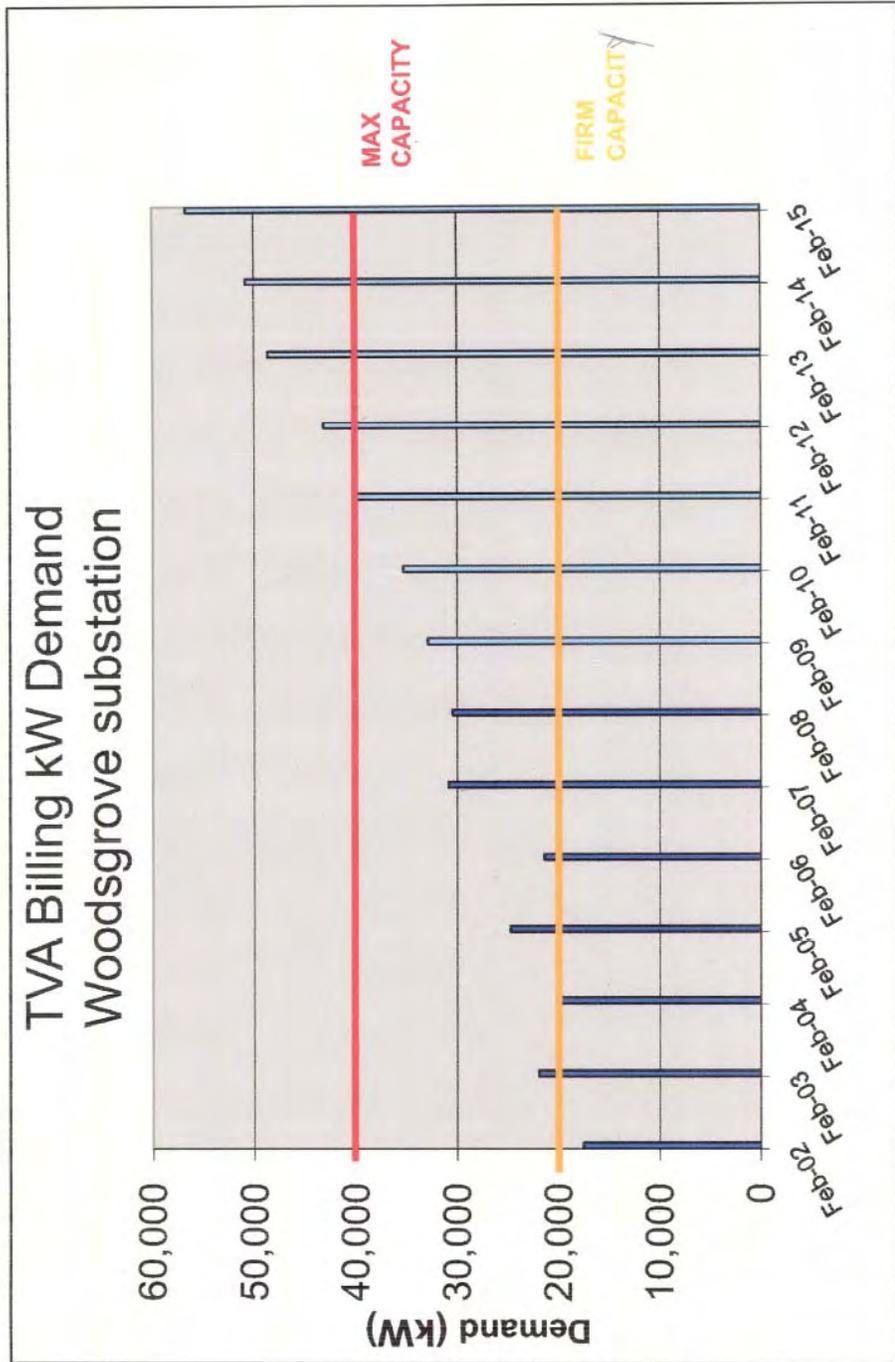
Load Projections by Patterson & Dewar Engineers

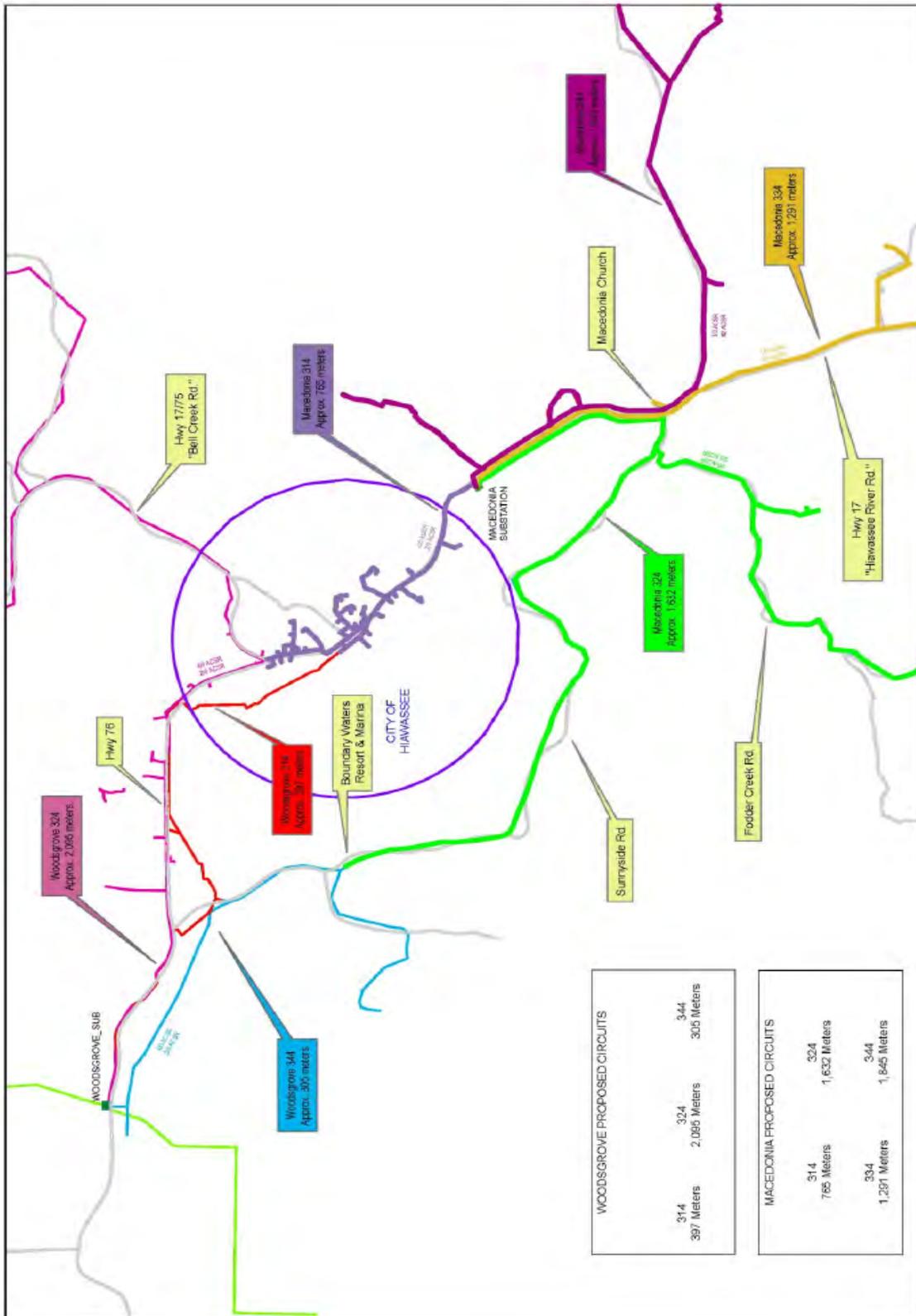


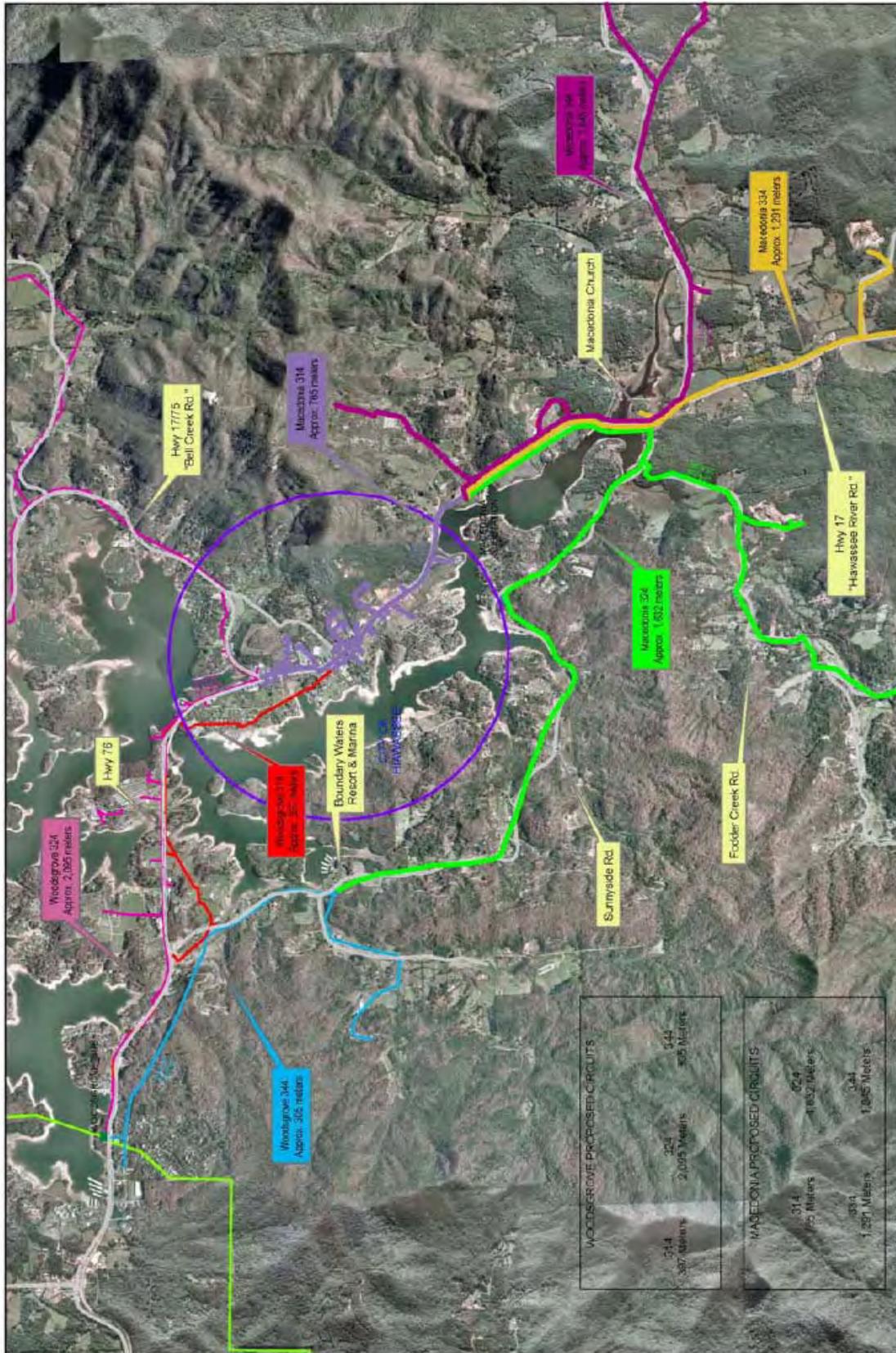
BLUE RIDGE MOUNTAIN EMC
GABI TOWNS
PATTERSON & DEWAR ENGINEERS

Blue Ridge Mountain EMC

TVA Billing kW Demand
Woodsgrove substation







Photographs of Similar Substations and Transmission Lines

Ranger 25KV Substation



Blue Ridge Mountain EMC
Simulation of New Line through Hiawassee

