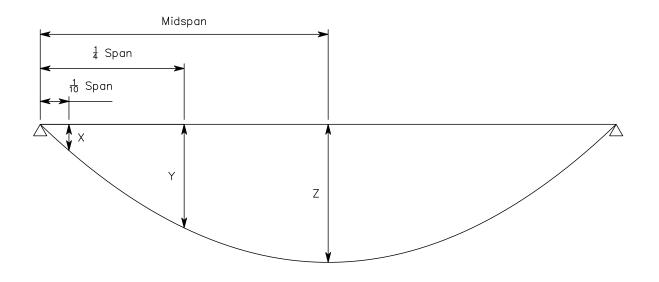
FOREIGN LINE CROSSING DATA

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PROFILE OF CROSSING SPAN										SPAN	OVER	T.V.A	A. RIG	HT-(OF-W	ΑY														
	PLAN VIEW OF CROSSING SCALE 1"= COORDINATE SYSTEM																													
			T.	V.A.	TRA	ANS	MISS	SION L	INE	DATA	4					WRE/LINE CROSSING DATA														
T.V.A. (CONDUC	TOR I	HEIGH	ГАТ	CRO	SSII	NG,	AT TEN	ИР		°F (AM	BIEI	NT)			NUMBER OF PHASES NEUTRAL?(Y/N)														
TIME &	c DATE	TVA	CON	DUC	TOR	ME	ASU	IRED								PHASE WIRE SIZE, STRANDING & TYPE														
PROFIL																NESC 250B LOADING & DESIGN TENSION														
DISTAN											ING		_			NEUTRAL WRE SIZE, STRANDING, MATERIAL														
GROUN	D ELEV	/ AT	INTE	RSEC	OIT	N C	OF CI	ENTER	RLINE	.S						STRUCTURE # N/Lat: E/Long: GROUND ELEV HIGHEST ATTACHMENT AGL						. 1								
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												FOREIGN LINE WIRE CLEARANCE TO GROUND																		
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CONFIGURATION AT STRUCTURES W/ DIMENSIONS RUR-										Date																				
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The elevation of TVA's wire at its lowest sag (highest operating temperature) is used when determining the crossing wire's allowable elevation. Field measurements of TVA wire elevations cannot be used to measure clearances to proposed crossings.

The figure below shows the calculated sag for $954~45/7~ACSR @ 9000^{\#}~NESC~250B$ Medium District design tension for level spans at various lengths and temperatures. Sags varies for different conductor sizes, tensions, conductor types, lengths of adjacent spans, attachment elevations, etc., but the concept of sag versus temperature & span length is illustrated.

Because of this vertical travel with temperature change, crossings near the midspan of TVA's transmission lines should be avoided unless the profile of ground is decidedly favorable, such as when crossing deep valleys.



SAG TABLE												
Span Length		15°F	60°F	120°F	212°F							
250'	X	0.4	0.8	1.4	2.2							
	Y	0.9	1.6	3.0	4.6							
	Z	1.2	2.2	3.9	6.2							
500'	X	2.0	2.8	3.8	5.1							
	Y	4.2	5.8	7.9	10.7							
	Z	5.7	7.8	10.6	14.2							
750'	X	4.9	5.9	7.1	8.8							
	Y	10.2	12.3	14.8	18.3							
	Z	13.6	16.3	19.8	24.4							
1000'	X	8.9	10.1	11.5	13.4							
	Y	18.6	20.9	23.9	27.9							
	Z	24.8	27.9	31.8	37.2							
1500'	X	20.5	21.8	23.4	25.7							
	Y	42.8	45.4	48.7	53.5							
	Z	57.0	60.5	64.9	71.3							
2000'	X	37.1	38.4	40.1	42.6							
	Y	77.2	80.0	83.5	88.7							
	Z	102.9	106.5	111.2	118.1							