

## 132/33/11 kV Substation Commissioning Checklist

**Location:**

**Date:**

**Bay:**

(a) Current Transformer					Remarks
		R	Y	B	
1.	Insulation resistance				
2.	Ratio and polarity				
3.	Magnetization curve				
4.	Burden				
5.	Star point check				
6.	Double grounding check				
7.	Body grounding				
8.	Core allocation				
9.	Unused core grounding				

(b) Potential Transformer					Remarks
		R	Y	B	
1.	Insulation resistance				
2.	Ratio				
3.	Burden				
4.	Body grounding/ primary grounding				
5.	Core Allocation				

<b>(c) Breaker</b>		<b>Remarks</b>
<b>1.</b>	Insulation Resistance	
<b>2.</b>	Remote/Local Operation	
<b>3.</b>	Interlock	
<b>4.</b>	Contact Resistance	
<b>5.</b>	Timing test	
<b>6.</b>	Anti-pumping	
<b>7.</b>	TCS Relay	
<b>8.</b>	Pressure monitor	
<b>9.</b>	Body grounding	

<b>(d) Lightning Arrester</b>		<b>Remarks</b>
<b>1.</b>	Insulation Resistance	
<b>2.</b>	Counter	
<b>3.</b>	Body grounding	

<b>(e) Isolator</b>		<b>Remarks</b>
<b>1.</b>	Insulation Resistance	
<b>2.</b>	Contact resistance	
<b>3.</b>	Remote & Local operation	
<b>4.</b>	Motor Current	
<b>5.</b>	CT switching	

<b>(f) Earth Switch</b>		<b>Remarks</b>
1.	Interlock	
2.	Operation	
3.	Contact resistance	
4.	Grounding	

<b>(g) Relay &amp; Control Panel</b>		<b>Remarks</b>
1.	Panel grounding	
2.	Relay body grounding	
3.	DC changeover	
4.	Cable dressing	

<b>(h) Battery charger and battery</b>		<b>Remarks</b>
1.	Charging test	
2.	Battery capacity test	
3.	Cell voltage	
4.	Specific gravity of electrolyte	

<b>(i) Transformer</b>		<b>Remarks</b>
<b>1.</b>	Insulation Resistance	
<b>2.</b>	Winding resistance	
<b>3.</b>	HT, LT excitation	
<b>4.</b>	Turn ratio	
<b>5.</b>	Magnetic balance	
<b>6.</b>	Tan-delta	
<b>7.</b>	BCT test	
<b>8.</b>	Oil BDV	
<b>9.</b>	WTI and OTI	
<b>10.</b>	PRD and Buchholz relay	
<b>11.</b>	Arcing horn gap	
<b>12.</b>	Fan operation	
<b>13.</b>	Tap changer remote and local operation & auto mode	
<b>14.</b>	Air release from all valve and valve position	

## **Commissioning Overall Report**

**Commissioning Engineer:**

**Signature:**

**Date:**