



**THE EFFECT OF SPLICE SHUNT ON THE MIDSPAN
JOINT USED IN THE ACSR 250 CONDUCTOR ON THE
ELECTRICAL AND MECHANICAL PROPERTIES**

UNDERGRADUATE THESIS

**Submitted as one of the requirements to obtain
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CIKARANG

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ABSTRACT

Disturbances occur in the transmission system in the form of a decrease in quality in the midspan joint, this disturbance is a major disturbance that can result in company losses and electrical system failures. This research aims to analyze the comparison of electrical resistance, rated breaking strength, and mechanical strength of midspan joints. The research methods used include laboratory testing for electrical resistance measurement, RBS calculation, and tensile testing to determine the mechanical strength of the conductor. In this study entitled "The effect of splice shunt on the midspan joint used in the ACSR 250 conductor on the electrical and mechanical properties" it was found that the use of splice shunt on the midspan joint resulted in lower electrical resistance than the reference conductor resistance. In addition, RBS calculation shows that midspan joint with splice shunt has 39% higher mechanical strength than midspan joint without splice shunt.

Keywords: Electrical resistance, Midspan joint, Splice shunt, ACSR 250 conductor, Rated breaking strength (RBS)

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TABLE OF CONTENT

PANEL OF EXAMINER APPROVAL	i
STATEMENT OF ORIGINALITY	ii
THESIS APPROVAL	iii
SCIENTIFIC PUBLICATION APPROVAL FOR ACADEMIC INTEREST	iv
ADVISOR'S APPROVAL FOR PUBLICATION	v
TURNITIN TEST RESULTS	vi
GPTZERO TEST RESULTS	vii
ABSTRACT	viii
ACKNOWLEDGEMENT	ix
TABLE OF CONTENT	xi
LIST OF FIGURES	xiii
LIST OF TABLES	xiv
LIST OF FORMULAS	xv
CHAPTER 1 INTRODUCTION	1
1.1. Background	1
1.2. Problem Identification	2
1.3. Objectives	2
1.4. Scope and Limitations	2
1.5. Outline	3
CHAPTER 2 LITERATURE REVIEW	4
2.1 Splice Shunt	4
2.2 Midspan Joint	4
2.3 Conductor	7
2.1.1 Copper type conductor	7
2.1.2 Aluminium type conductor	8
2.1.2.1 ACSR (Aluminium Conductor Steel Reinforced)	8
2.1.2.2 TACSR (Thermal Aluminium Alloy Conductor Steel Reinforced)	8
2.1.2.3 ACCC (Aluminium Conductor Composite Core)	9
2.4 Electrical Resistance	9
2.5 Tensile Strength	10
2.4.1 Strain	11

2.4.2 Stress	11
CHAPTER 3 RESEARCH METHODOLOGY	13
3.1 Place and Time of Implementation.....	13
3.2 Research Flow Chart.....	13
3.3 Research Flow Chart Description	14
3.4 Tools and Material	15
3.4.1 Tools	15
3.4.2 Material	17
3.5 Testing Arrangement	22
3.6 Tensile Testing Procedure	23
3.7 Rated Breaking Strength.....	23
3.8 Resistance Measurement Work Steps.....	24
3.9 Tensile Test Work Steps	24
CHAPTER 4 RESULT AND DISCUSSION.....	25
4.1 Results.....	25
4.1.1 Resistance Measurement Results	25
4.1.2 Tensile Test Results	26
4.1.2.1 Tensile test results without splice shunt.....	26
4.1.2.2 Calculation of RBS midspan joint without splice shunt	27
4.1.2.3 Tensile test results with splice shunt.....	29
4.1.2.4 Calculation of RBS midspan joint with splice shunt	30
4.2 Discussion.....	32
4.2.1 Comparison of electrical resistance	32
4.2.2 Comparison of RBS	32
CHAPTER 5 CONCLUSION AND RECOMMENDATION	34
5.1 Conclusion	34
5.2 Recommendation	34
REFERENCES	35

LIST OF FIGURES

Figure 2.1 Splice Shunt	4
Figure 2.2 Steel Sleeve for Conductor ACSR and TACSR	5
Figure 2.3 Aluminium Sleeve for Conductor ACSR and TACSR.....	5
Figure 2.4 ACSR and TACSR Conductor Crimps Point [6].....	5
Figure 2.5 Composite Sleeve ACCC Conductor	6
Figure 2.6 Aluminium Sleeve ACCC Conductor	6
Figure 2.7 ACCC Conductor Crimps Point.....	6
Figure 2.8 Bare Copper Conductor [7].....	7
Figure 2.9 ACSR Conductor [8].....	8
Figure 2.10 TACSR Conductor [9]	8
Figure 2.11 ACCC Conductor [10]	9
Figure 3.1 Research Flow Chart.....	13
Figure 3.2 Horizontal Tensile test machine.....	15
Figure 3.3 Micro Ohm Meter	16
Figure 3.4 Splice Shunt	17
Figure 3.5 Specification of the Splice Shunt	17
Figure 3.6 ACSR 250 Conductor	18
Figure 3.7 Midspan Joint for ACSR 250 [19]	19
Figure 3.8 Specification of the Midspan joint	19
Figure 3.9 Compression Dead End for ACSR 250 [20].....	20
Figure 3.10 Specifications of the Compression Dead End for ACSR 250.....	21
Figure 3.11 Testing Arrangement.....	22
Figure 3.12 Tensile Testing Procedure.....	23
Figure 4.1 Tensile Test Results Without Splice Shunt.....	26
Figure 4.2 Value RBS Without Splice Shunt	28
Figure 4.3 Tensile Test Results With Splice Shunt.....	29
Figure 4.4 RBS Conductor With Splice Shunt.....	31
Figure 4.5 Electrical Resistance With Splice Shunt.....	32
Figure 4.6 Rated Breaking Strength Comparison.....	32

LIST OF TABLES

Table 3.1 Specification of the Splice Shunt	18
Table 3.2 Specification of Conductor ACSR 250 [18].....	19
Table 3.3 Specification of the Midspan joint	20
Table 3.4 Specifications of the Compression Dead End for ACSR 250	21
Table 4.1 Resistance Test Result Conductor ACSR 250 With Splice Shunt	25
Table 4.2 Test Result ACSR 250 Conductor Without Splice Shunt	26
Table 4.3 Test Result Tensile Test	29

LIST OF FORMULAS

Formula 2.1 Electrical Resistance	9
Formula 2.1 Tensile Strain	11
Formula 2.2 Tensile Stress	11
Formula 3.1 Rated Breaking Strength	23