Torque Sharing Report

Hakan Saraç

Contents

1 Introduction

I have implemented torque sharing using three different approaches. In this document, I have collected the results for evaluation.

2 Equal Torque Distribution Between Modules

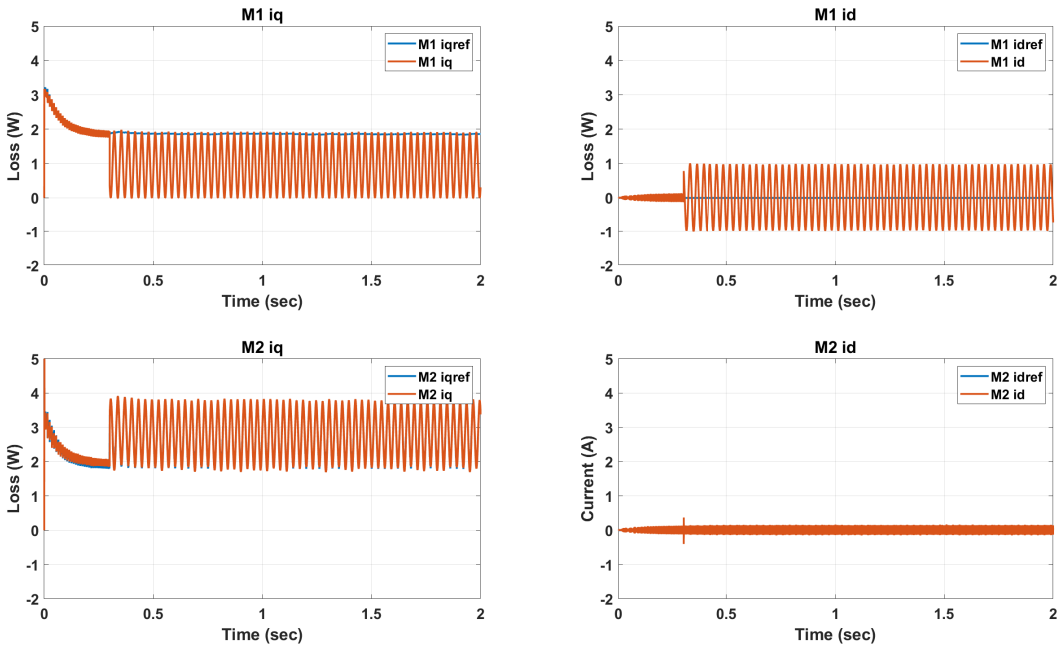

Figure 1: dq Phase Currents and References for Equal Torque Distribution

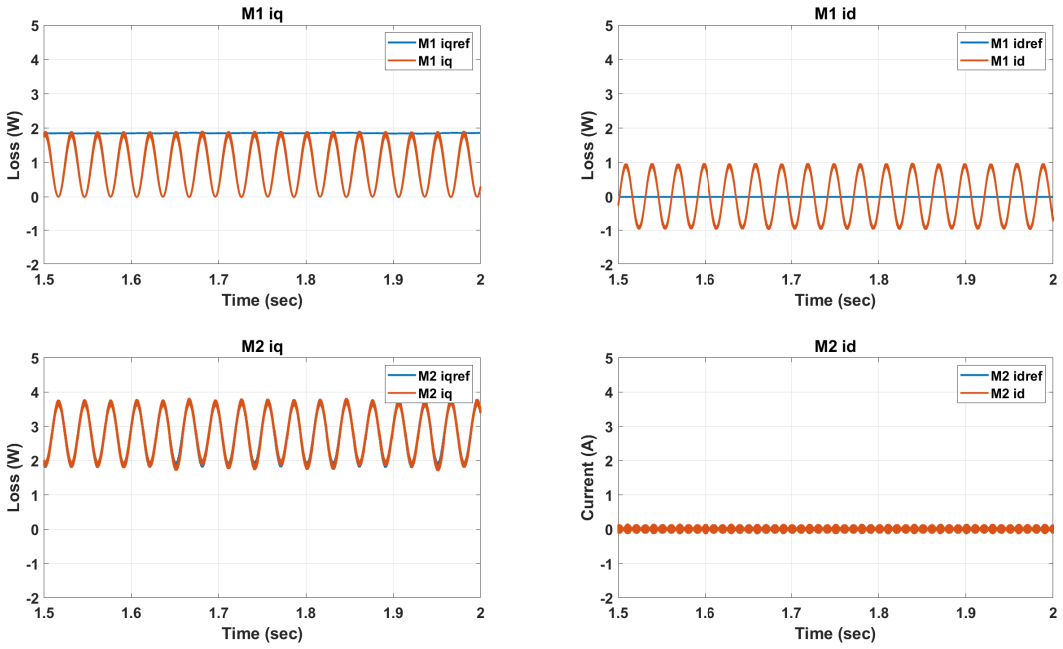

Figure 2: dq Phase Currents and References for Equal Torque Distribution Closer

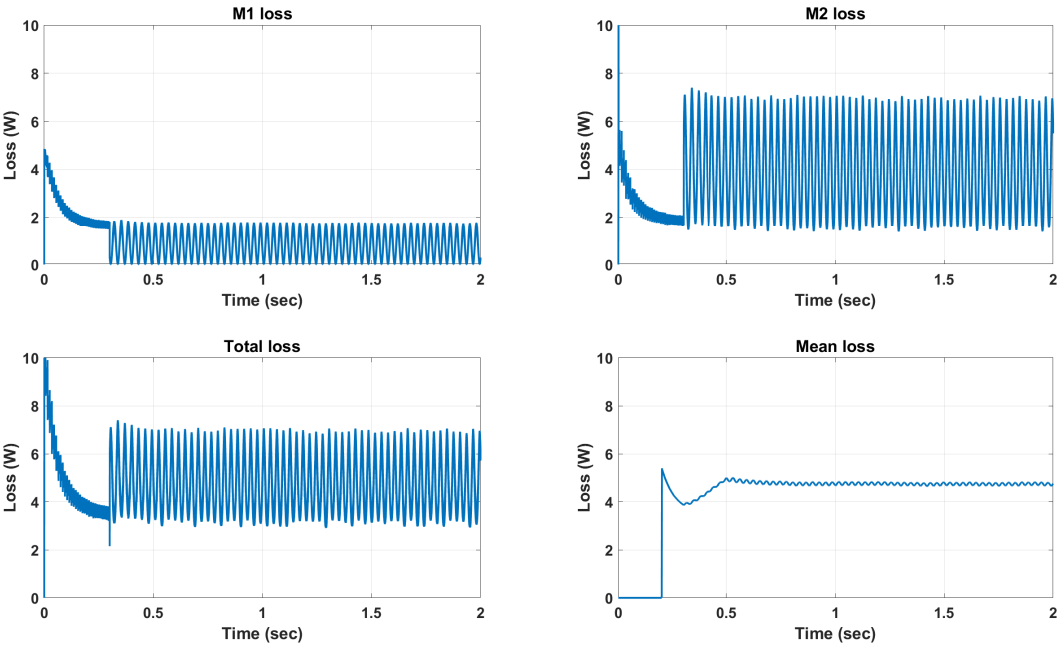

Figure 3: Module Losses for Equal Torque Distribution

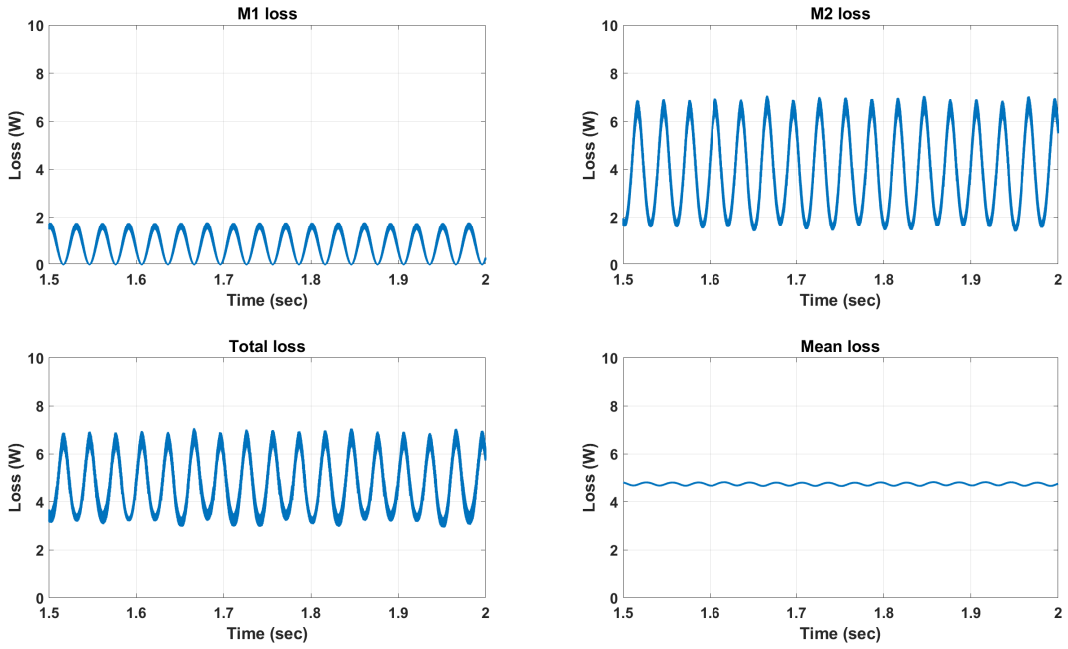

Figure 4: Module Losses for Equal Torque Distribution Closer

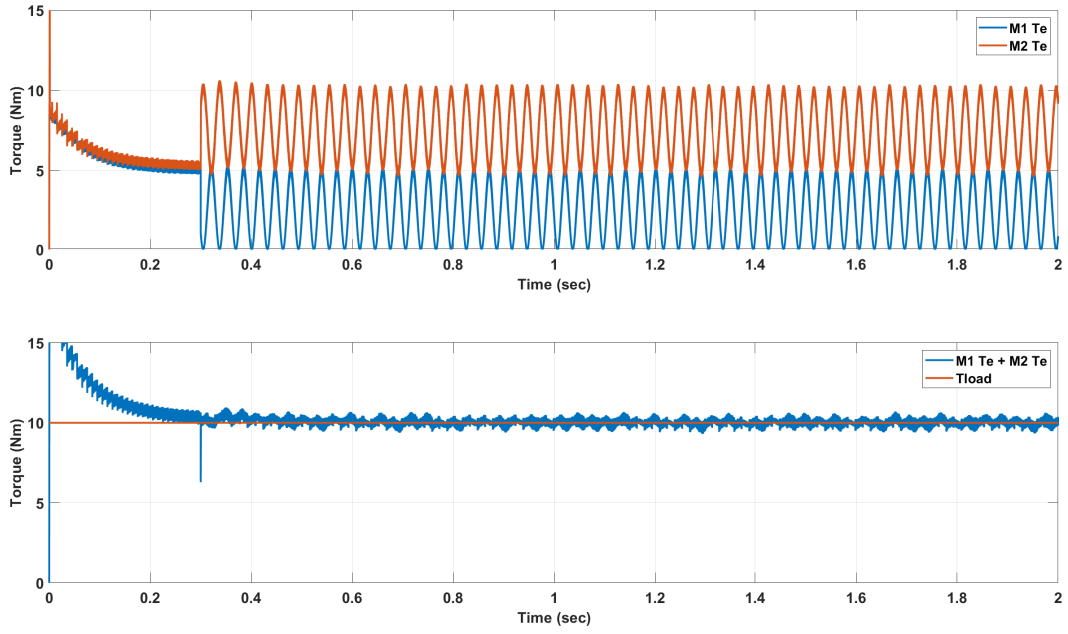

Figure 5: Module Losses for Equal Torque Distribution

3 Proposed Optimum on a paper

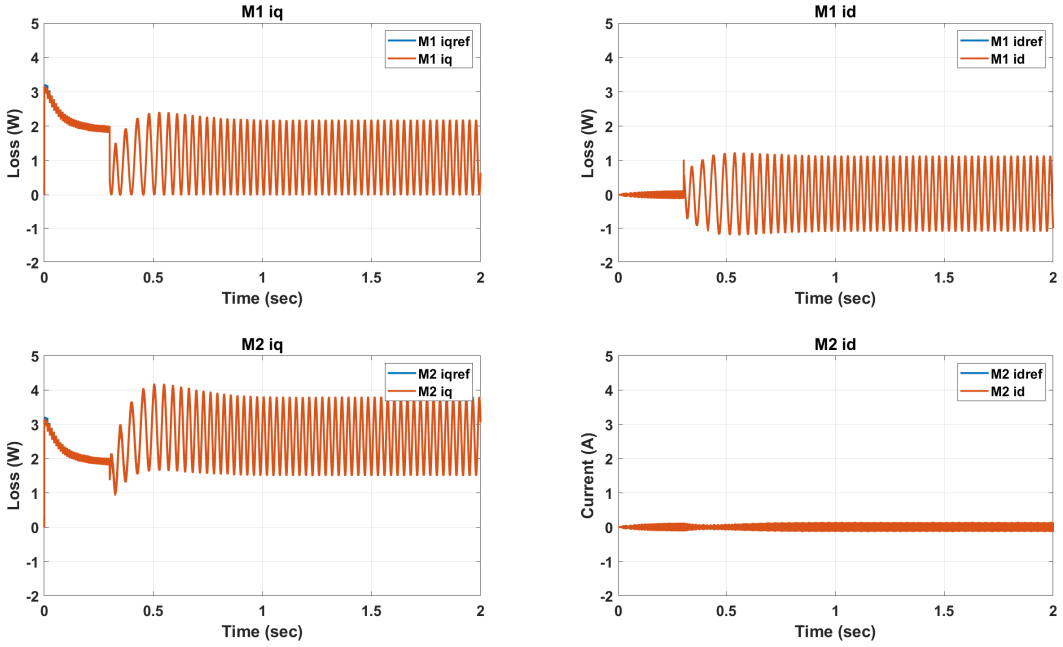

Figure 6: dq Phase Currents and References for Proposed Optimum Distribution

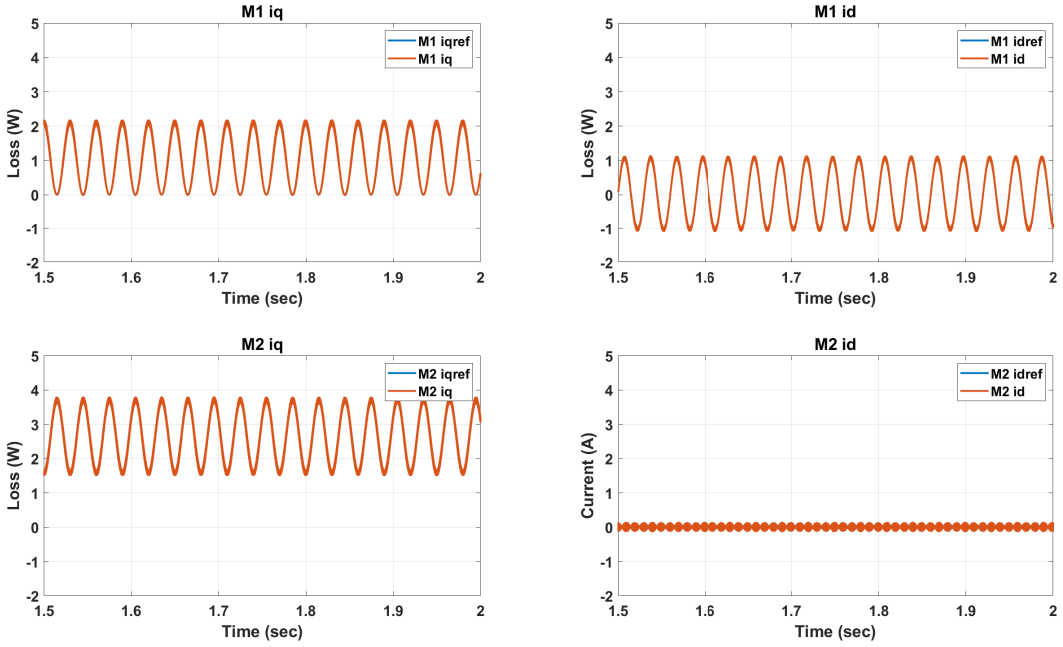

Figure 7: dq Phase Currents and References for Proposed Optimum Distribution Closer

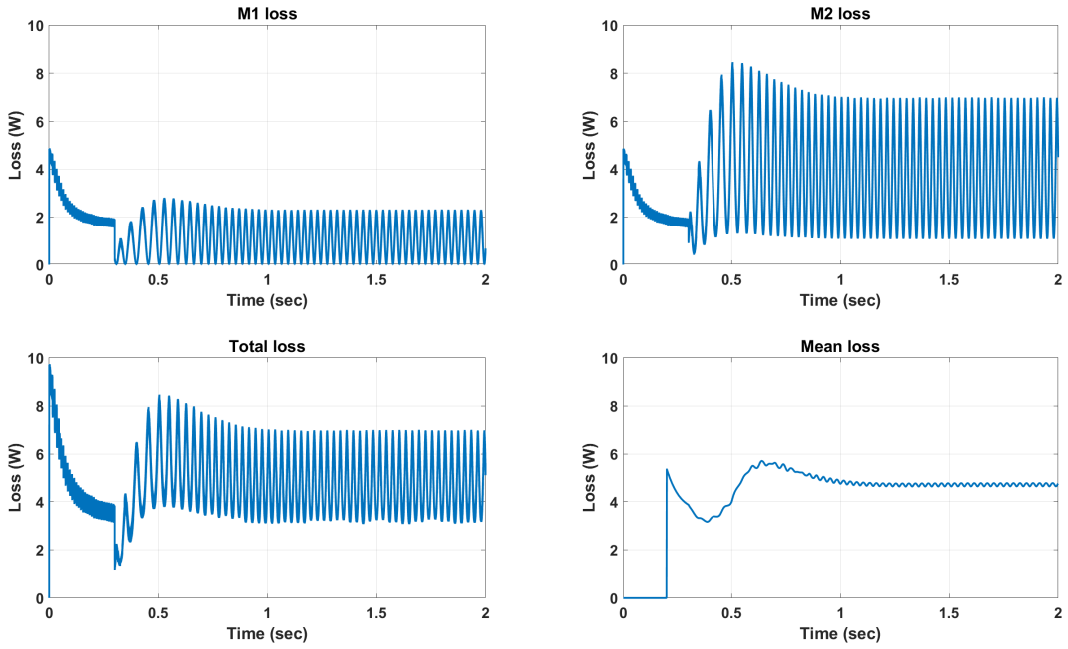

Figure 8: Module Losses for Proposed Optimum Distribution

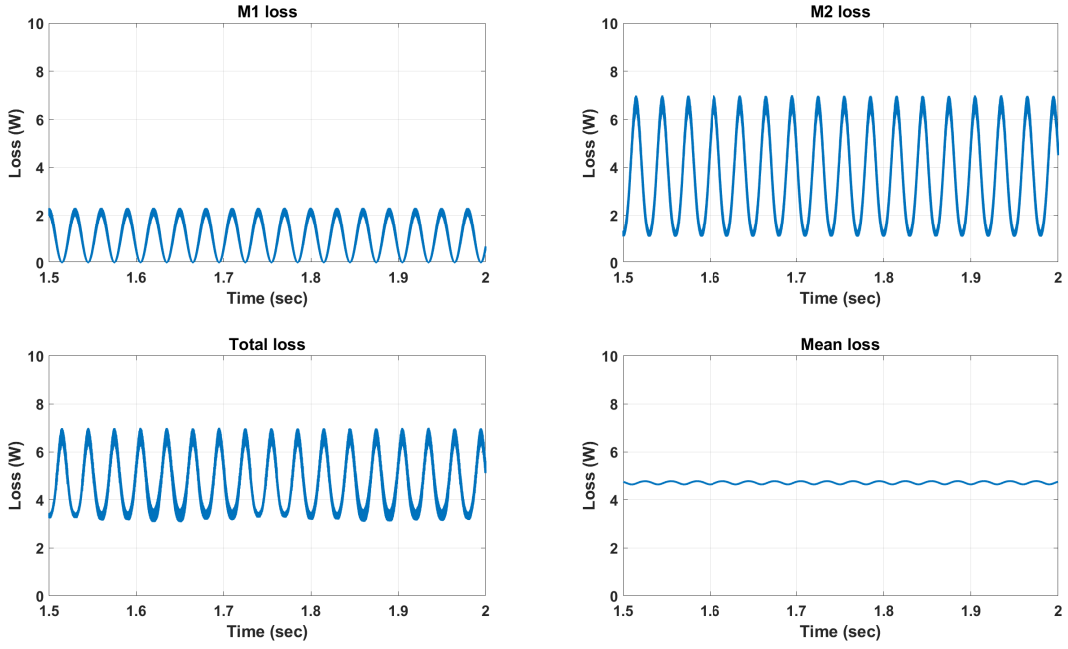

Figure 9: Module Losses for Proposed Optimum Distribution Closer

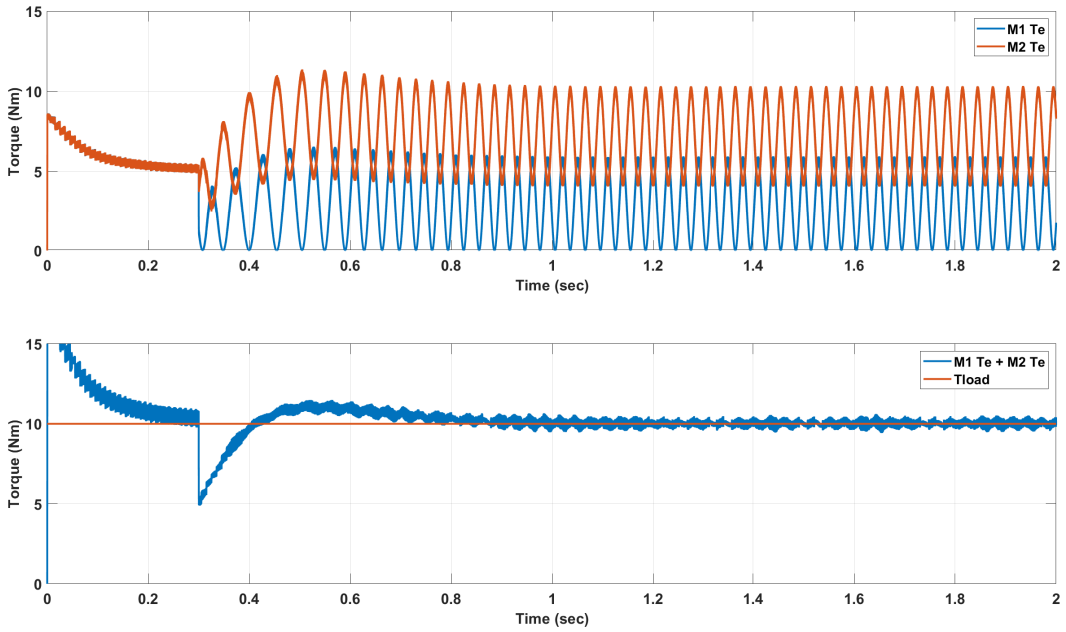

Figure 10: Module Losses for Proposed Optimum Distribution

4 MyMethod

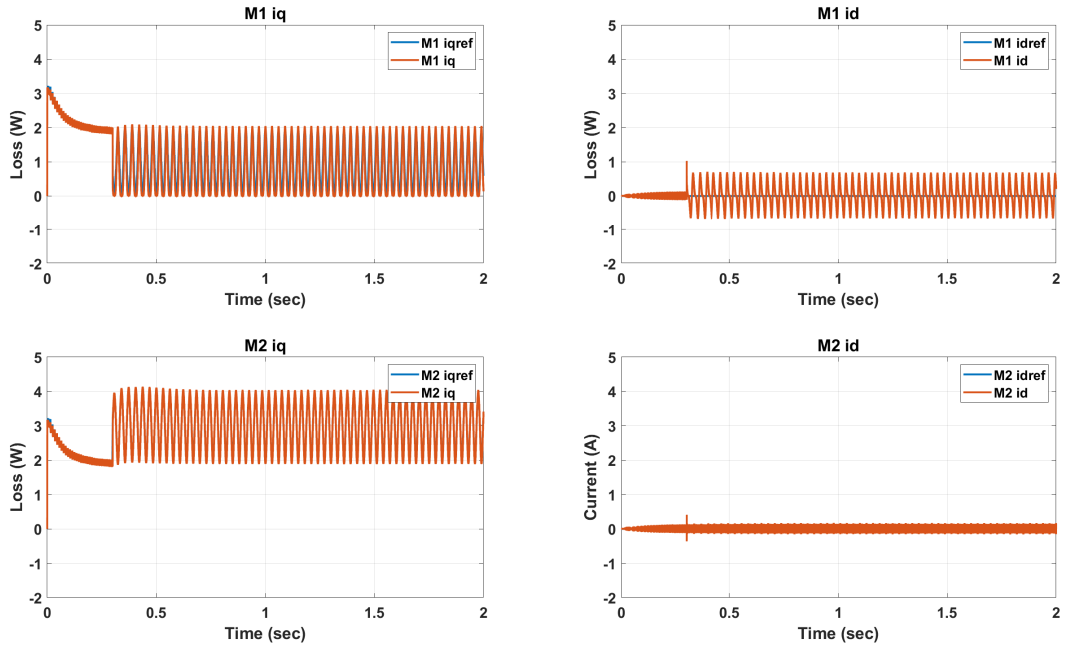

Figure 11: dq Phase Currents and References for My Method

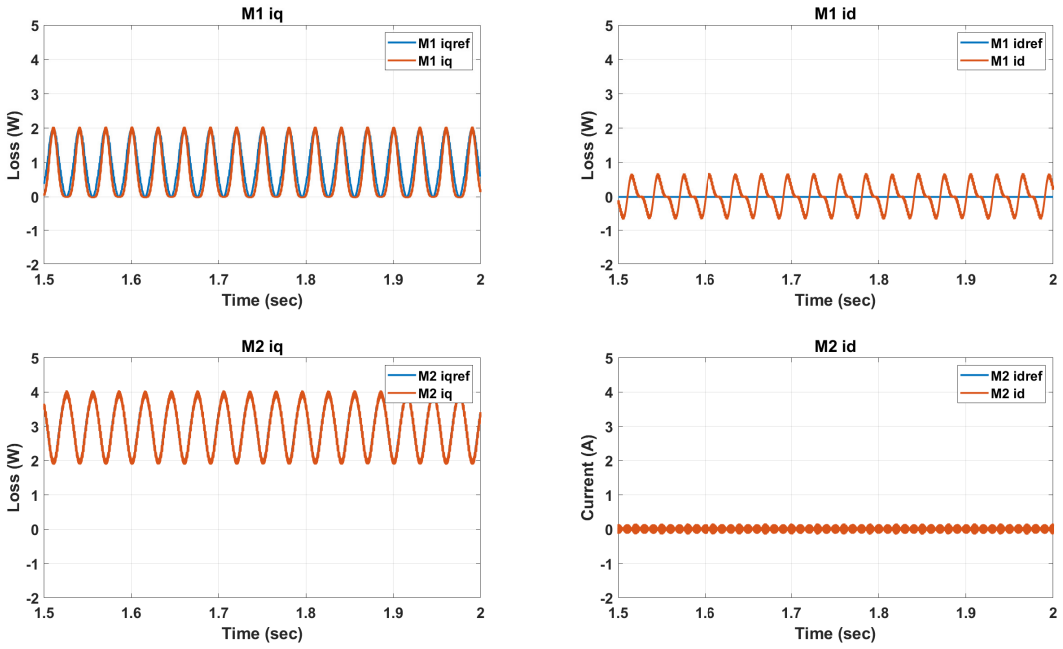

Figure 12: dq Phase Currents and References for My Method Closer

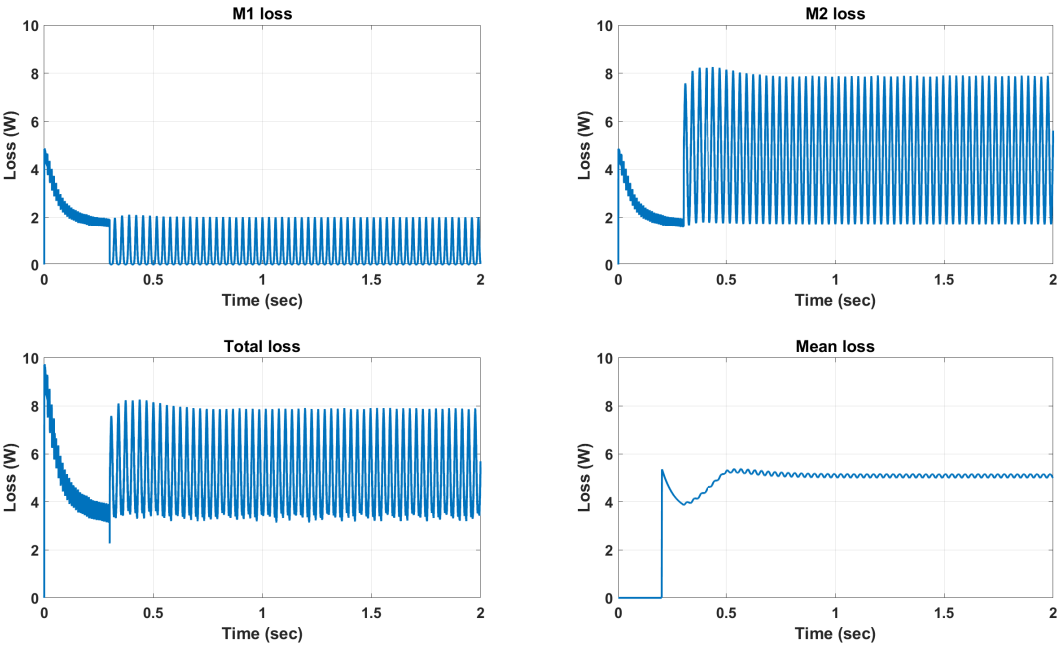

Figure 13: Module Losses for My Method

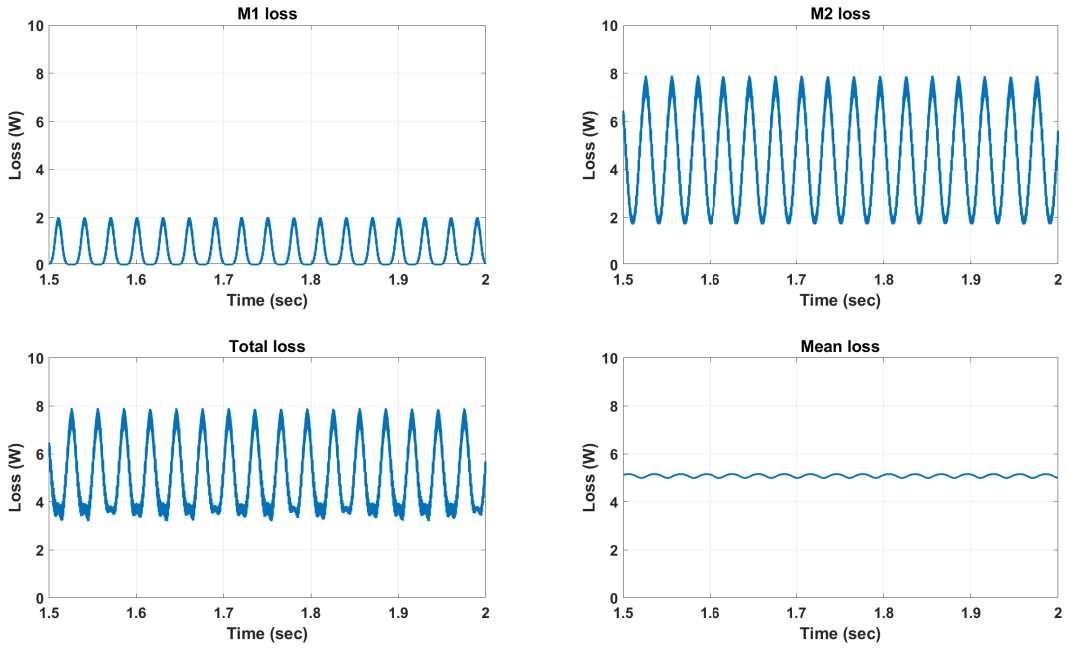

Figure 14: Module Losses for My Method Closer

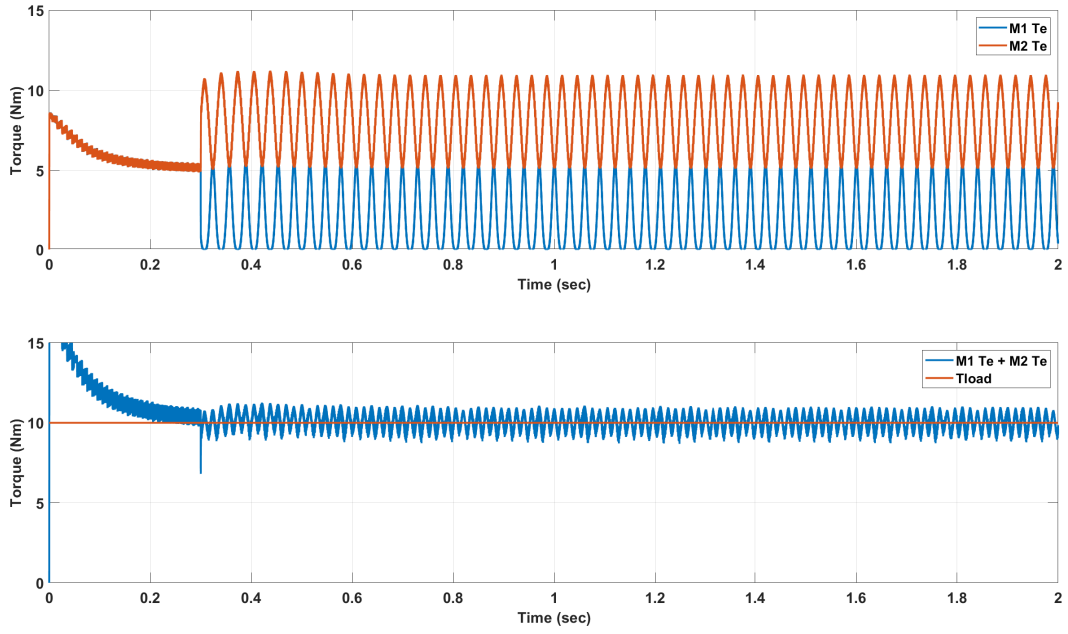

Figure 15: Module Losses for My Method

References