CHAPTER V

CONCLUSION

From all the analysis, the conclusion reached below.

1. All the DAF number of the pylon from the moment, shear, axial, and the displacement has the different number, but has the similar pattern of each frame of the pylon. The maximum number appear in the DAF related to moment, and then the shear, the deflection, and the minimum DAF is appear in the calculation related to the axial. The DAF in the pylon is relative big, it reach 4.87, because there is a big increasing value from the static to dynamic analysis. This caused by the height of the pylon.
2. All the DAF number of the main girder from the moment, shear, axial, the displacement also has the different number. The DAF number is maximum in the Axial comparison. But, all the DAF number have the similar number, that is the number of the range 1-1.3, except for the axial. So, in the main girder, The DAF number to be used is 1.25, that is the maximum DAF number from the calculation related to moment.
3. The DAF number of the cables show the different number from all the cable. The outer cables have the bigger value than the inner cables. The outermost cable reach the DAF of 5.24. the inner the cable the less the DAF. The minimum DAF appear in the inner cable near the pylon, the shortest cable, that is 1.52.

4. Generally, the design guideline for the cable stayed bridge due to cable rupture indicate the DAF for the cable stayed bridge in range 1.5 to 2. Whereas comparing to this study, the DAF of the main girders is relative small. But, for the pylon and the cables, the DAF is exceeding the design guideline. There also many research showing that for the certain circumstance, the DAF can be larger than 2. So, the relative big value of the pylon and cables DAF in this study may caused by the seismic load that really impacting to the big, long, and high component of this cable stayed bridge.