Load Case 1.1

* Use Rotor Thrust and Tower Load
* Unidirectional waves co-directional with currents
* calculate loads for one selected combination of waves, currents and water levels prescribed by the code.

Wave

T = 5.8 seconds

L = 51.7m, D/L<0.2, D < 0.2 \* 51.7, D < 10.34m

Load Case 6.1c

* Use Tower Load
* Calculate corresponding to Highest Astronomical Tide conditions.

Compare Load Cases and Specify ultimate design loads.

For calculating waves and current loads use the method for slender structures. Discuss the applicability of this approximation for your structure and wave-current conditions. Discuss alternative methods of calculating wave-current loads. You can use Figure 7-1 from DNV- RP-C205 to help you in your discussion.

Morison’s Load Formula

Keulegan-Carpenter number: , T =