3. Section 3.1: The derivation of Eqt. (7) is not explained in enough detail. It is unclear how this equation for the turbine power is derived by equating the wind turbine thrust to the thrust of the dynamic positioning thrusters.

The details of the derivation are as follows:

Eq. 3: $T_{\mathrm{WT}} = \frac{1}{2}\rho_a A W^2 C_T$

Eq. 6: $P_{\mathrm{T}} = \frac{N}{D}\left(\frac{T_{\mathrm{T}}}{KN}\right)^{3/2}$

Equating the wind turbine rotor thrust (Eq. 3) and the thrusters delivered thrust in Eq. 6 (line 129 of the manuscript):

$$P_{\mathrm{T}} = \frac{N}{D}\left(\frac{\frac{1}{2}\rho_a A W^2 C_T}{KN}\right)^{3/2}$$

$$P_{\mathrm{T}} = \frac{N}{D}\frac{\frac{1}{2}\rho_a A W^2 C_T}{KN}\sqrt{\frac{\frac{1}{2}\rho_a A W^2 C_T}{KN}}$$

$$P_{\mathrm{T}} = \frac{1}{KD} \times \frac{1}{2}\rho_a A W^2 C_T \times W\sqrt{\frac{1}{2}\frac{\rho_a A C_T}{KN}}$$

$$P_{\mathrm{T}} = \frac{1}{2}\rho_a A W^3 \times C_T \times \frac{1}{KD}\sqrt{\frac{1}{2}\frac{\rho_a A}{KN}C_T}$$

$$P_{\mathrm{T}} = \frac{1}{2}\rho_a A W^3 \times C_T \times \sqrt{\frac{1}{2}\frac{\rho_a A W^2}{K^3 D^2 N}C_T}$$

Using $C_T = 4a(1-a)$:

$$P_{\mathrm{T}} = \frac{1}{2}\rho_a A W^3 \times 4a(1-a) \times \sqrt{\frac{1}{2}\frac{\rho_a A W^2}{K^3 D^2 N}4a(1-a)}$$

$$P_{\mathrm{T}} = \frac{1}{2}\rho_a A W^3 \times 4a(1-a)^2 \times \sqrt{2\frac{\rho_a A W^2}{K^3 D^2 N}\frac{a}{1-a}}$$

Which corresponds to Eq. 7