

Assume:

$$x = 100 \text{ m}$$
  
 $\theta = 1^{\circ}$ 

## 1. Solving for minimum streamer length 'y' for streamers to cross:

$$sin(\theta) = x / y$$
  
y = 100 m / sin (1°) = 5,730 m

## 2. Solving for minimum feather angle ' $\theta$ ' necessary for potential entanglement:

Assume:

$$z = 9,650 \text{ m (approx. 6 miles)}$$

$$tan(\theta) = x / z$$
  
 $\theta = arctan(100 \text{ m} / 9,650 \text{ m}) = 0.59^{\circ}$ 



PGS Exhibit 1086, p PGS v. WesternGeco (IPR2014-006