SLPE

Corrosion protection for deep water monopiles.

Nick Terry, Associate Director
nbt@slpe.com
www.slpe.com

What type of protection is needed?

None?

- ✗ Loss of wall thickness
- ✗ Huge fatigue impact

Coatings?

- ✗ Insufficient durability
- ✗ Inspection and repair

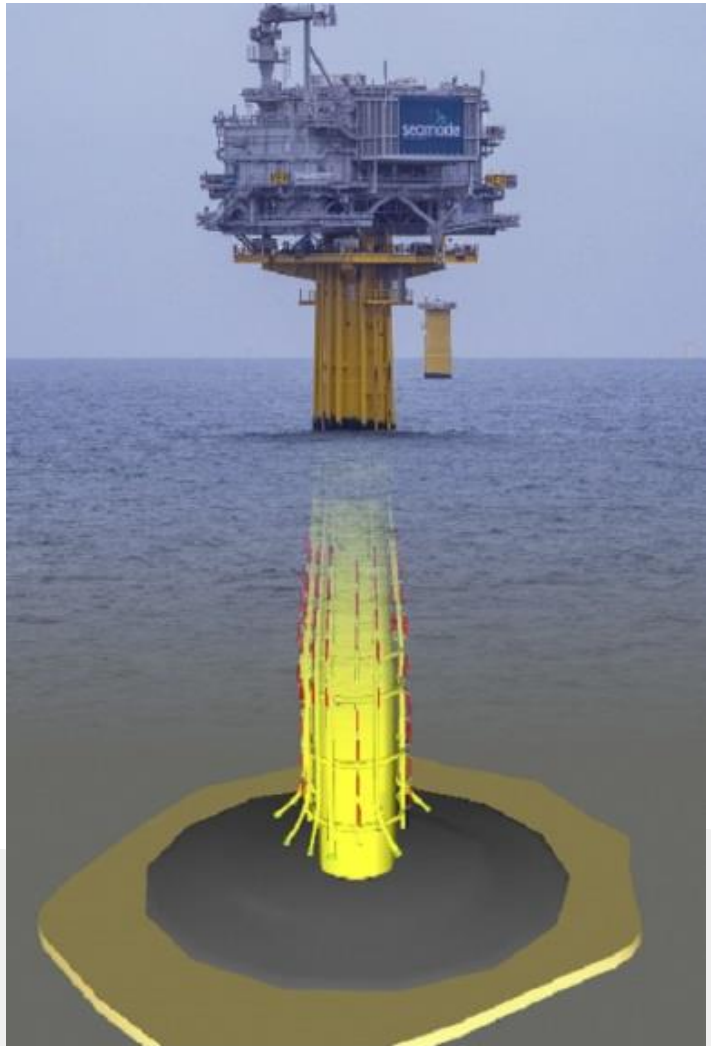
Cathodic Protection?

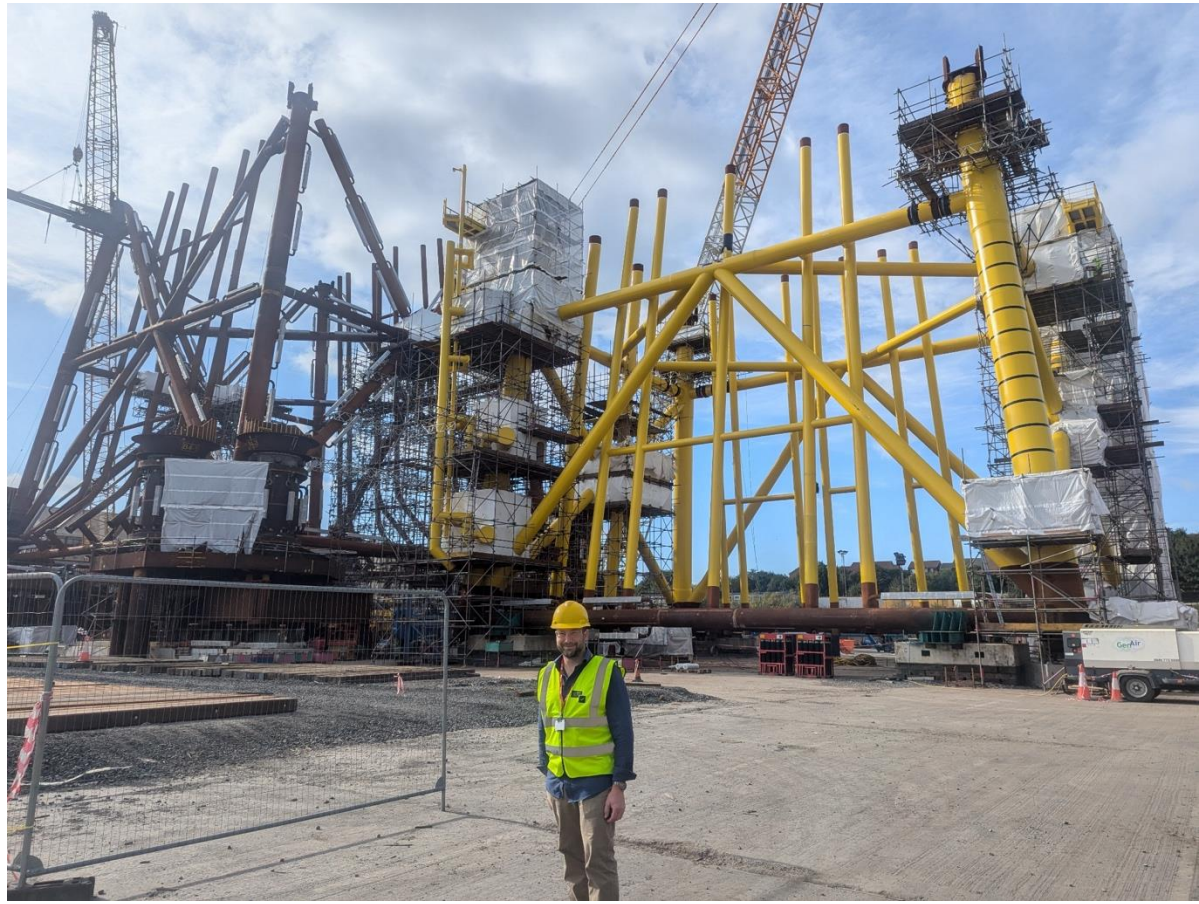
- ✓ Designed for full lifetime
- ✓ Minimal inspection needed

SLPE

What's the problem?

SeaStar and Mermaid OSS

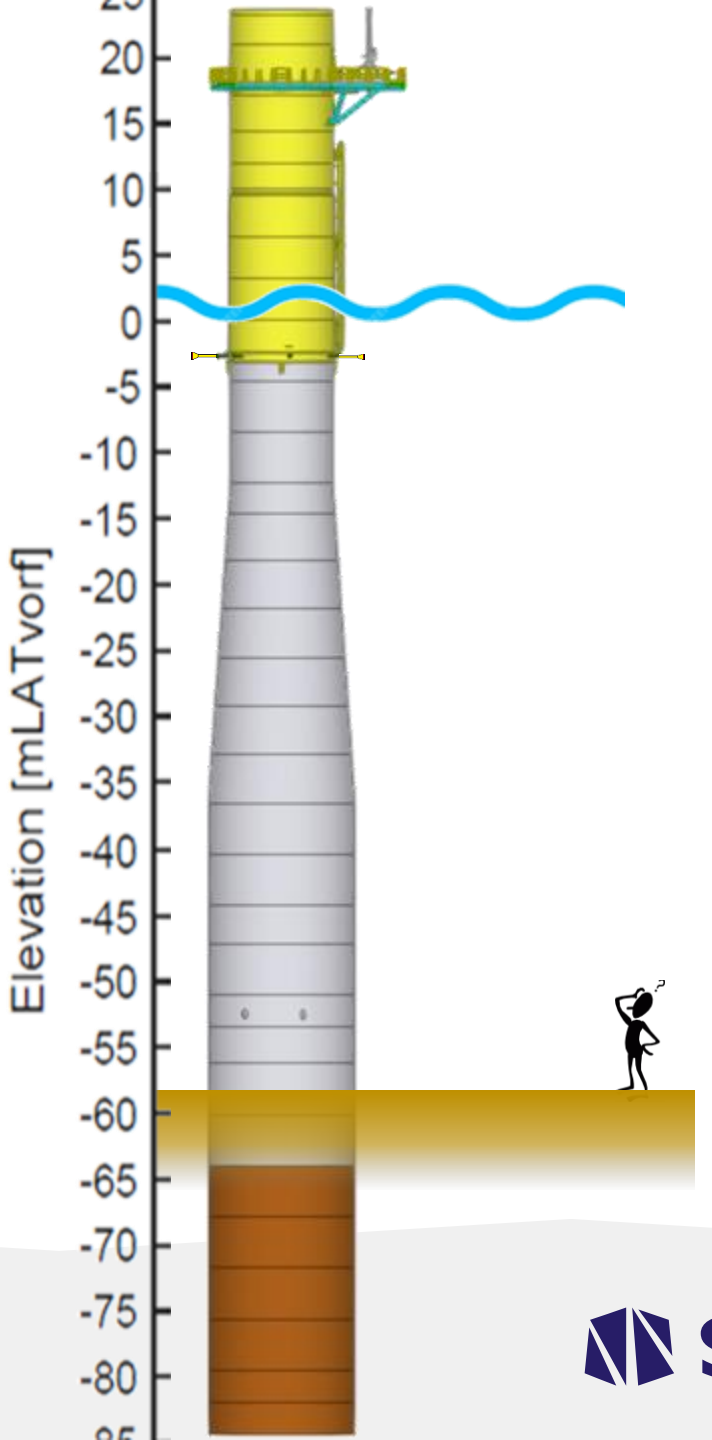




Inch Cape OSS

What's the problem?

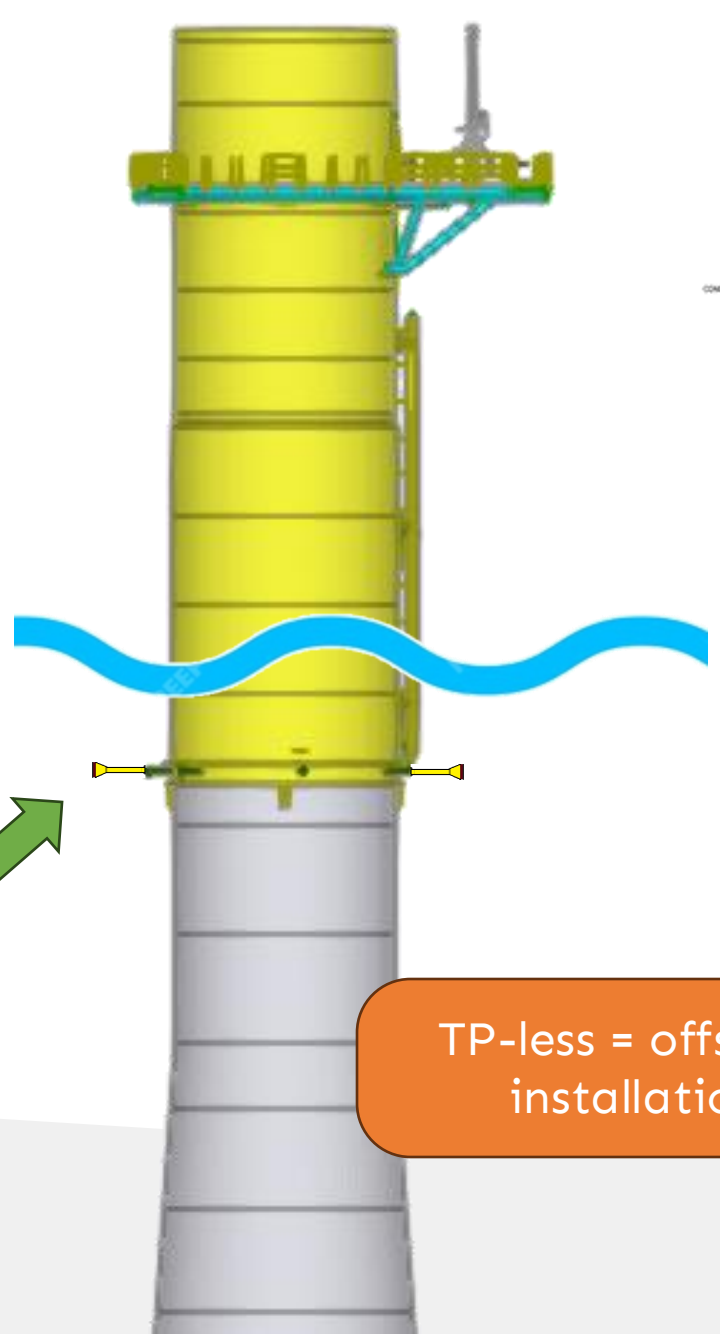
- Large surface area
- No fixed attachments

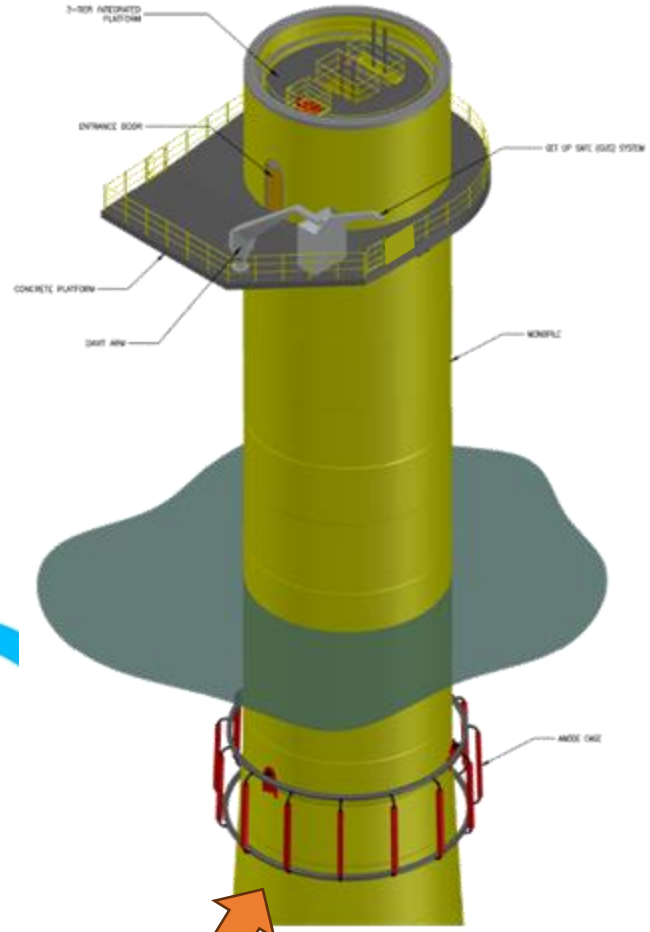


SLPE

Decision factors

- Configuration is key
- Offshore lifting is expensive





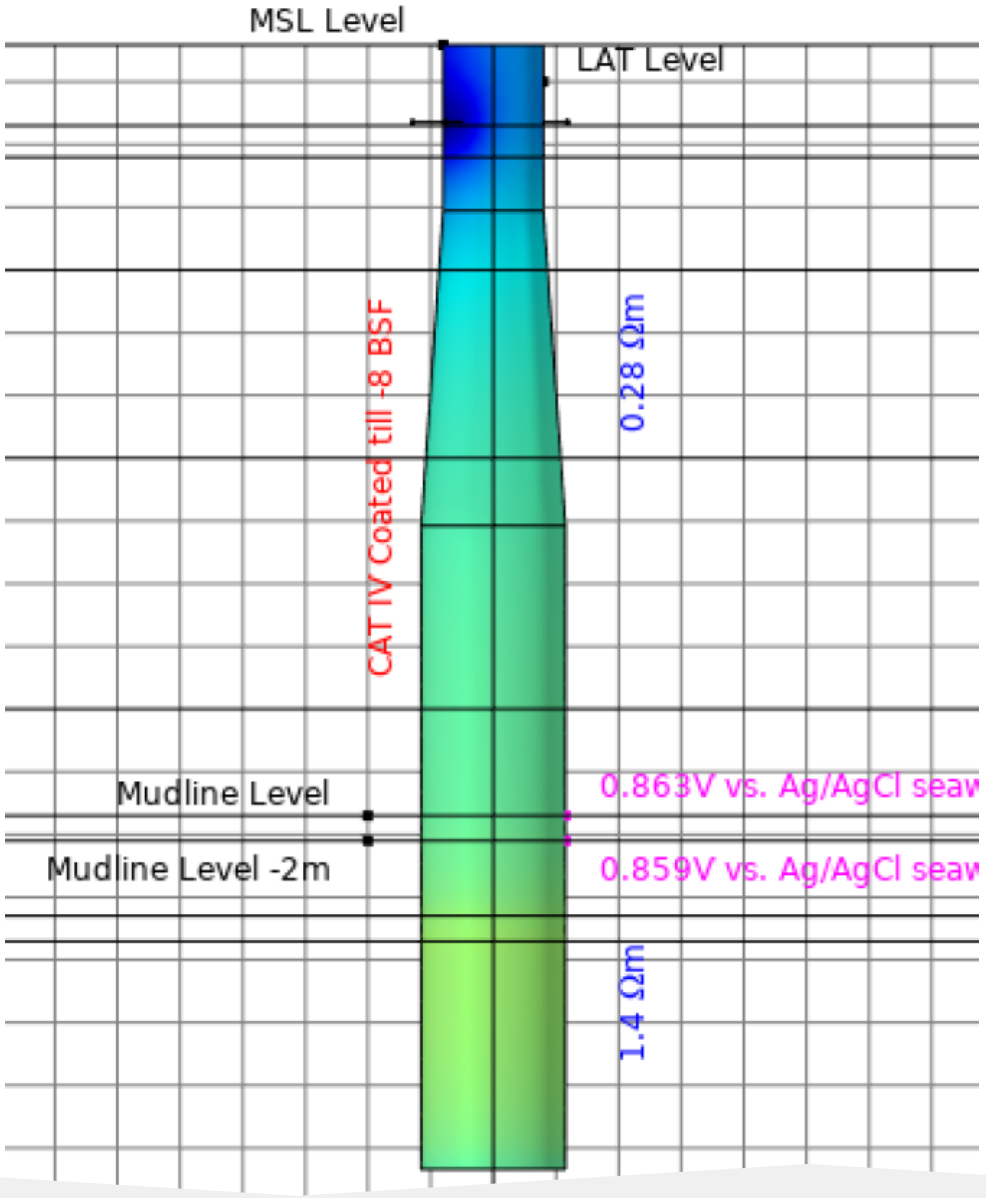
TPs give you options

TP-less = offshore installation

SLPE

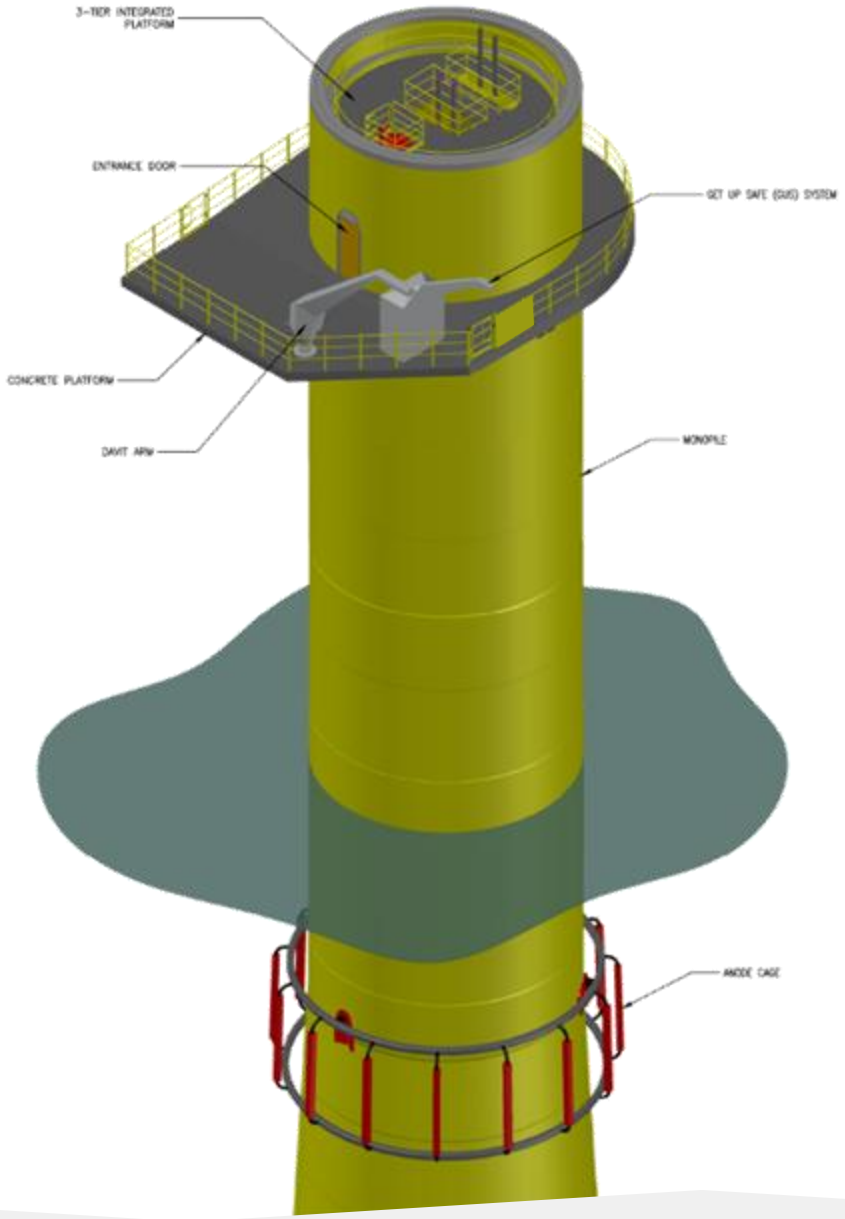
MP-TP

- TP skirt-mounted ICCP is possible
- Monopile coating is needed
- Long anode stand-off



TP-less

- Sacrificial anode cages
- ICCP anode rings
- Penetration-mounted ICCP anodes



Conclusions

- With a TP skirt, skirt-mounted ICCP anodes reduce offshore working
  - Long anodes impact transportation (e.g. deck space)
  - Coatings help anode performance

- With no TP skirt, multiple post-installed options are available
  - Selection depends on installation costs (offshore lifting)
  - Bespoke installation tools typically used
  - Recent innovations provide more flexible installation options

SLPE

SLPE

www.slpe.com