



# Wharf-to-Vessel Cable Connections

## Vessel Based Design



# Wharf-to-Vessel Cable Connections



# Shore to Ship Power

## Barge Power Transfer



# Shore to Ship Power

## Barge Power Transfer





# Shore to Ship Power

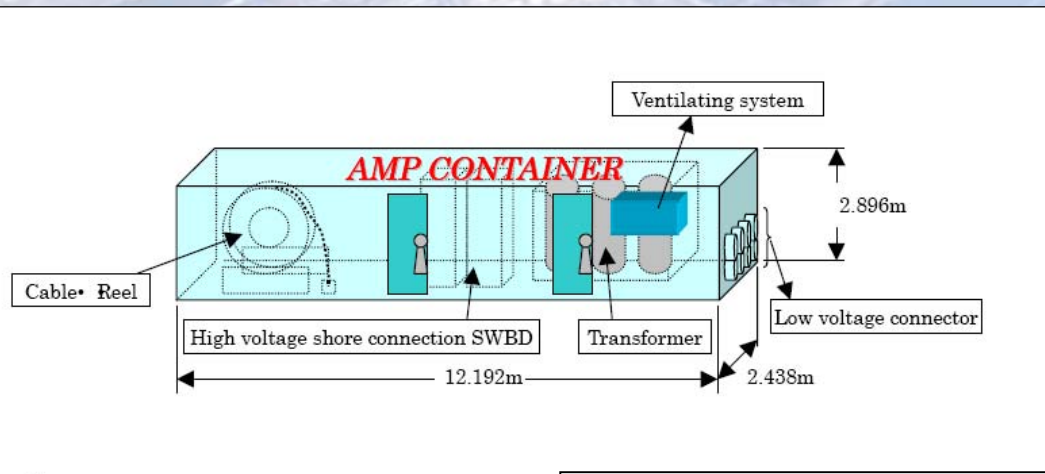
## Transformer Container Power Transfer System



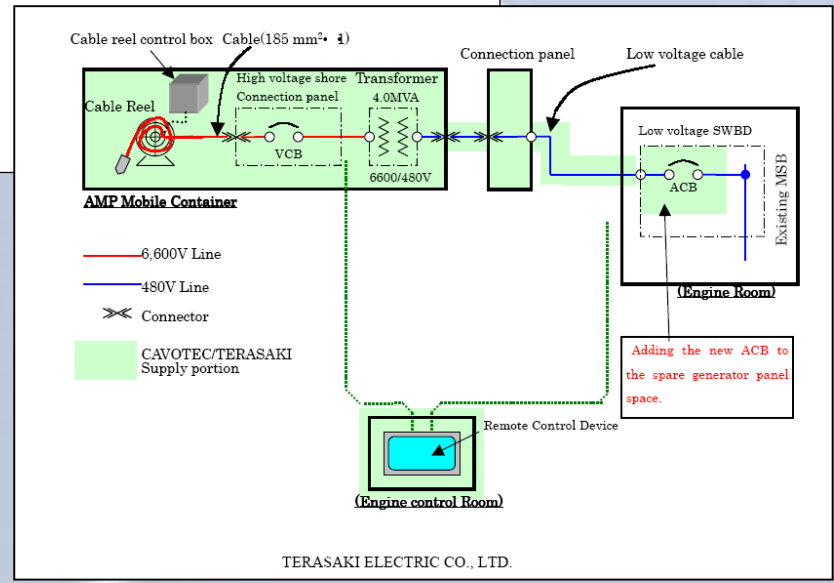


# Shore to Ship Power

## Transformer Container Power Transfer System



(\*) **Ventilating system**  
 Setting temperature 25 • Adjustable •  
 • Source • AC100V • 60Hz



# Shore to Ship Power

## Barge Power Transfer





# AMP: The Future

- Greater Environmental Awareness
- Ships are Becoming Larger

Seaspan to smash  
own record with  
10,500 teu ship

Source: Lloyds List Sept 03 – March 04

- Ship Electrical Demand will Increase
- Larger Vessels = Longer Port Stays
- Ship AMP Equipment = Standard





# AMP: The Future

## PIER 400 (Phase II)

- AMP Power Vault constructed
- Conduit installed



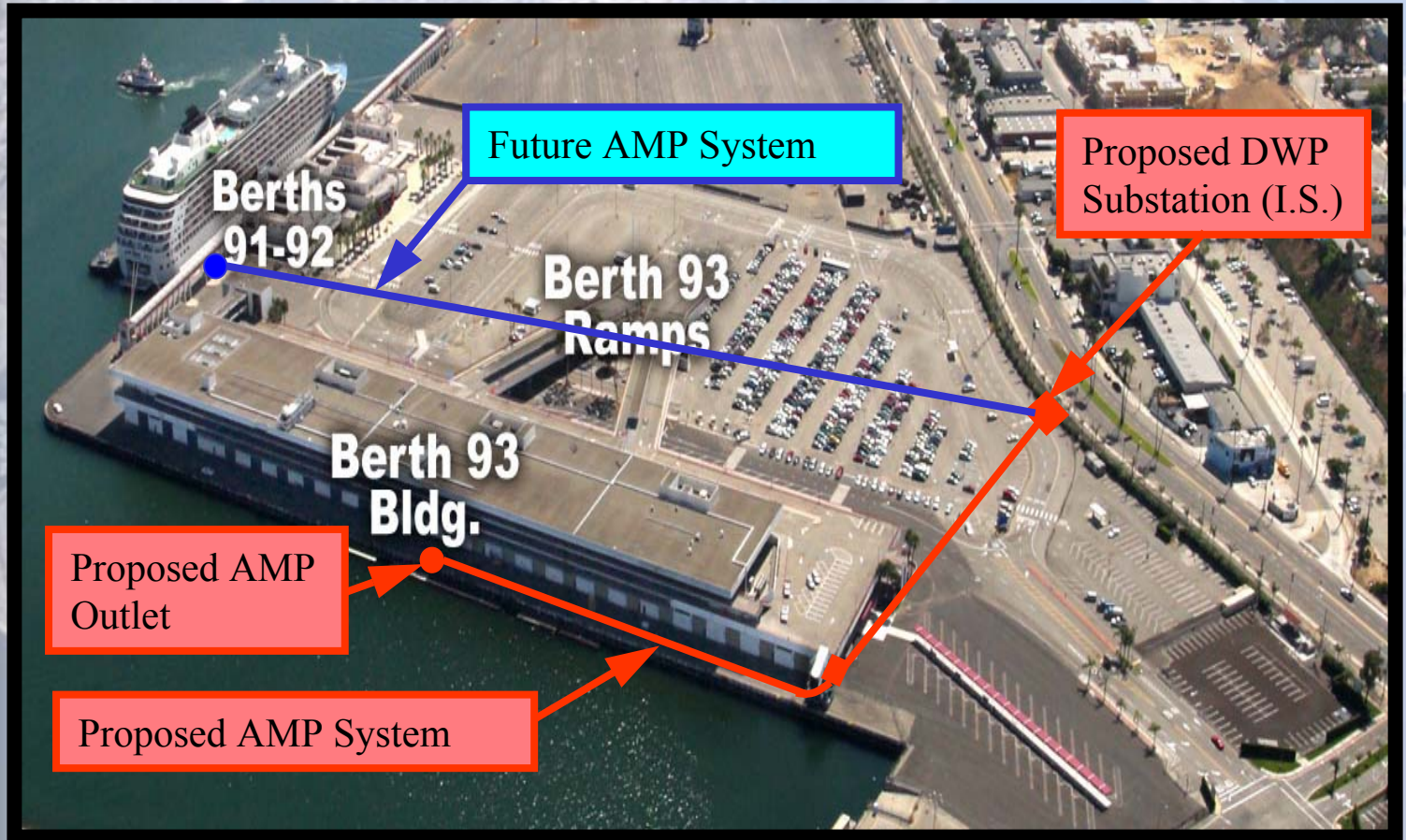
## Berth 215 – 221

- Commenced AMP design
- M/V NYK Atlas AMP outfitted (arrived POLA on August 2004)





# AMP Cruise Terminal





# AMP Program

# *The Future*

AMP Program = A Solution to meet  
Mayor James K. Hahn's Policy of  
***"No-Net Emissions Increase"***

