

Submarine Cable Update

June 2015

Bid Process

Step 1:

OPALCO requested project bid documents and bidder list from the following Utilities:

- Public Utility District No. 2 of Pacific County - Willapa Bay Cable 115 kV 9 mile submarine cable (Bid 2009-2013)
 - Project abandon due to cost and complexity)
- Tanner Electric Cooperative - Anderson Island (2010) - Complete
- Peninsula Light -Fox Island (2011) - Complete

Based on the documents received from the three Utilities, the Lopez to San Juan submarine cable replacement project bid documents were developed.

Step 2:

Submarine Cable Manufactures contacted for pre-bid information

(note: because OPALCO is borrowing funds from RUS only cable manufactures on the "Buy America" list were contacted:

- General Cable
- ABB
- Nexans
- Fujikura
- Sumitomo Electric
- Prysmian Cable

Submarine Cable Manufactures that requested bid documents:

- General Cable
- ABB/Nexans
- Sumitomo Electric
- Prysmian Cable

Submarine Cable Manufactures that submitted bids:

- Sumitomo Electric/RT Casey
- Prysmian Cable/Harbor Offshore, Inc.

Bid Process

Step 3:

Cable Bore:

All of the Submarine Cable projects researched above included a Boring segment as part of the Submarine Cable project:

Step 4:

Cable Bore contractors contacted for pre-bid information

- Mears group
- Trenchless Construction
- Michels Pipeline Construction
- Christenson Electric

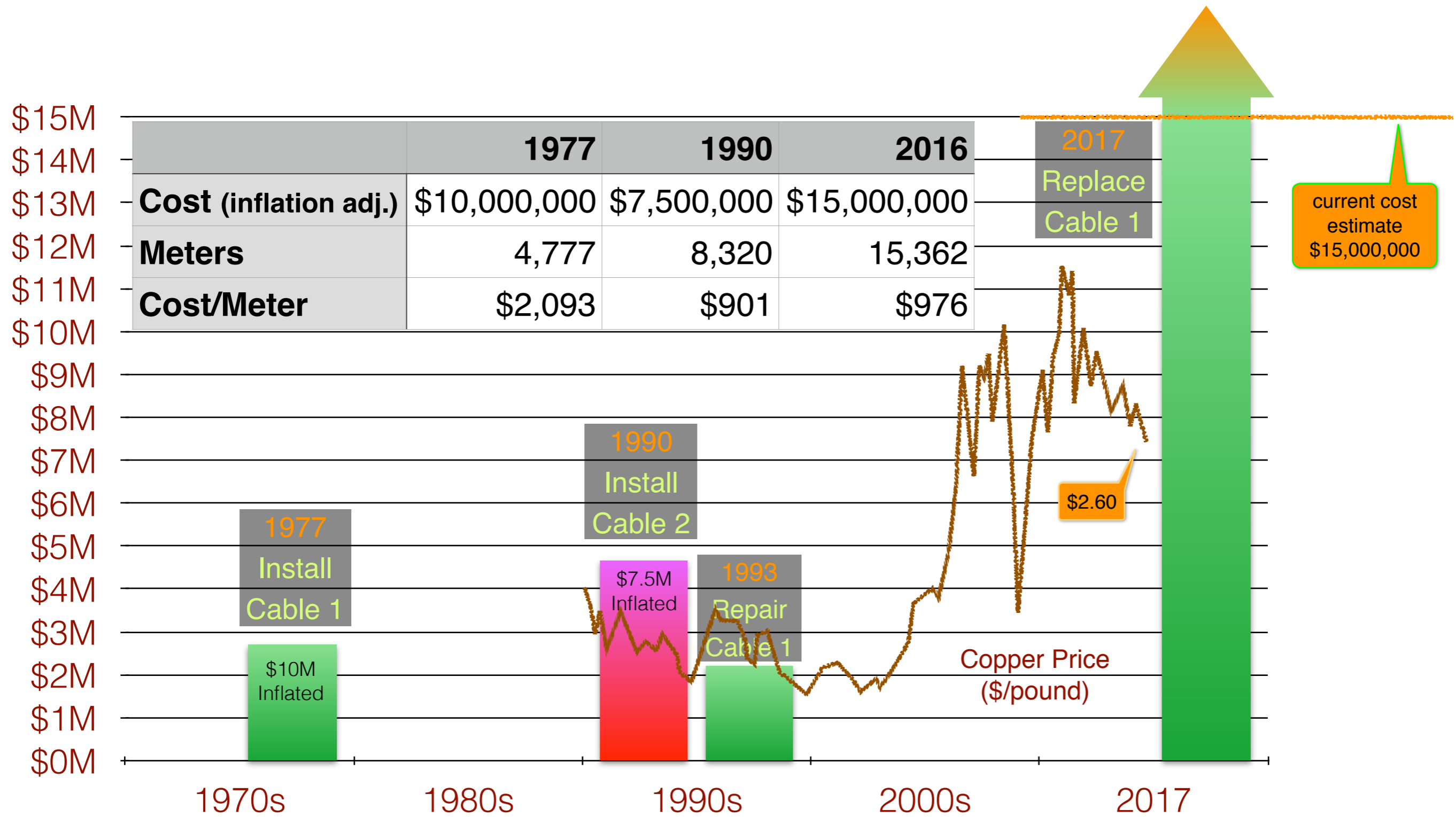
Contractors that requested bid documents:

- Mears group
- Trenchless Construction
- Michels Pipeline Construction

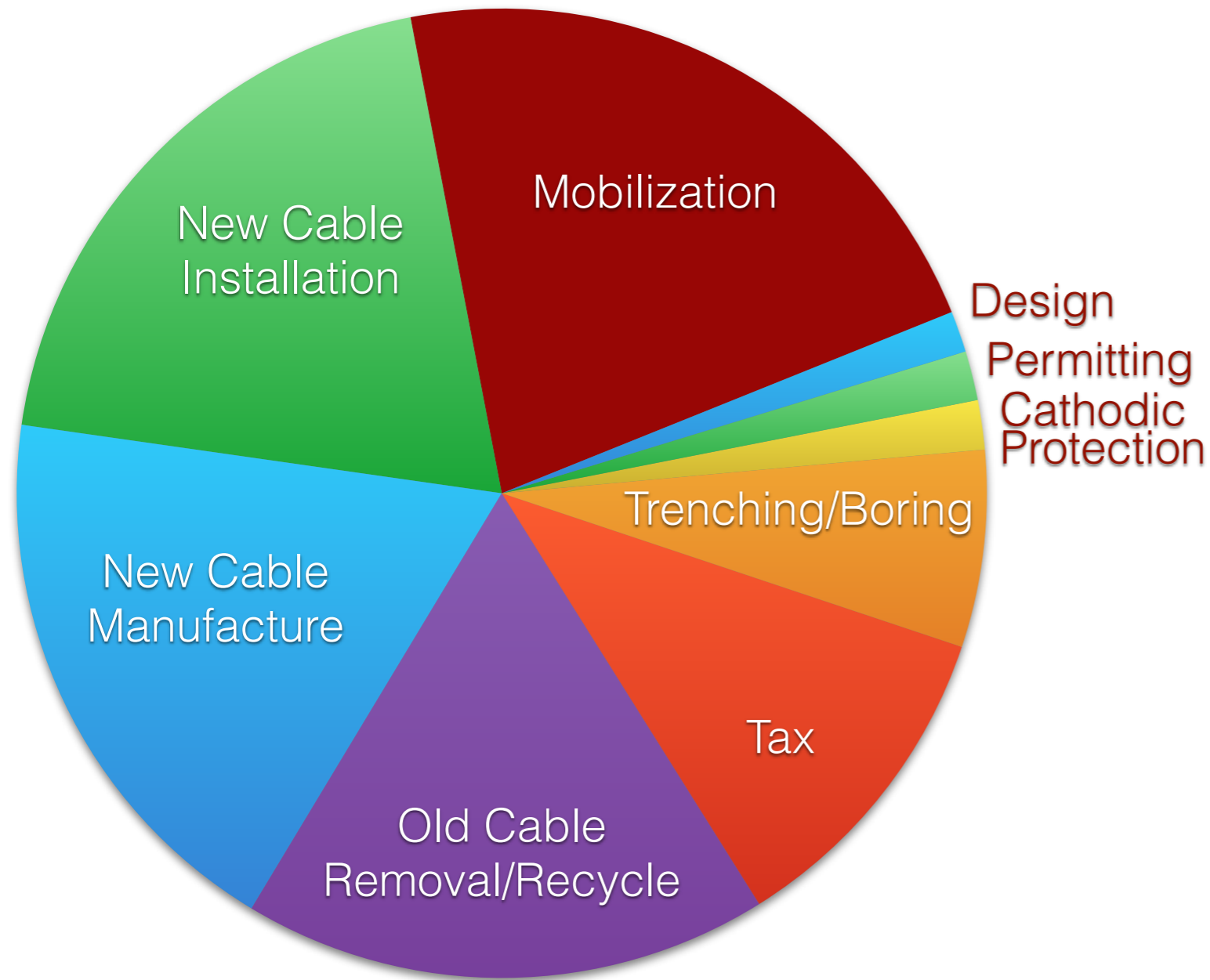
Contractors that submitted bids: (Both Michels and Mears group did not want to deal with the environmental aspects of the job)

- Trenchless Construction

Lopez - San Juan Submarine Cable Cost



Cable Project Cost Components



\$15 million project cost

Project Stages

- Design and Planning
- Permitting
- New Cable Manufacture
 - Made in America
 - 2 year wait
- Trenching and Boring
 - Avoid critical shoreline areas
- Tax
- Mobilization
 - 3 tugs, 2 barges, specialist work crews
- Old Cable Removal/Disposal
 - CLink to secure their cable
- New Cable Installation
 - up to \$280,000 per day
 - 30 people, fuel, barges, tugs, etc.
- Cathodic Protection, Connect to Grid