distance to a platform (68 miles). Ram Powell set a world water depth record for a production system installation, in 3,214 feet of water. Shell and Brazil’s national oil company, Petrobras, although not competing actively for records, are very close in attaining new depth records for production systems, subsea installations, and tieback distances.

Survey breakout

Forty-nine of the fields either have a development system in place (26 producing) or are planning a particular development system (23 planned). The remaining 47 prospects are under study.

Of the 26 fields now in production, 12 are utilizing subsea production systems, six have installed fixed platforms, two are using tension leg platforms, two are producing with a floating production system, one is using a spar floater, one is producing from a compliant tower, and one field is using both subsea and tension leg platform production systems.

The majority (12) of the 23 fields with development systems planned will be using subsea systems. This includes two floating production systems, three compliant towers, three spar floaters, two tension leg platforms, and one that will utilize both a tension leg platform and subsea systems. This illustrates the trend toward more floating production systems in the future for deepwater developments, using such systems as spars or FPSOs with subsea wells tied back to them.

Only 25 years ago, the edge of the continental shelf, at 200 meters or 656 ft, was considered deepwater. Few rigs had the capability to drill beyond that depth and there was little certainty of finding oil on the continental slope.

About 15 years ago, a large number of discoveries made in the flex trend, in the 600-1,600 ft depth range, started a run on drilling at the edge of the Continental Shelf and on the slope. Shell led the way in expanding exploration substantially in the 2,000-3,000 ft depth range. Other operators, BP, Exxon, and Texaco also brought in discoveries. The large number of 100 million-bbl fields beyond the 1,000 ft depth contour and the dropping cost of technology has secured the future of US Gulf operations.

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