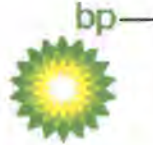




INTERNATIONAL PIPELINE AND OFFSHORE CONTRACTORS ASSOCIATION

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2007 BP Award Entry Form

1. Title of entry: **Low Application Temperature HPCC Coating**

2. Name of Company: Bredero Shaw

3. Country: Canada

Please tick box Member x Associate Member Academic Member

4. Summary of entry:

The need to reduce cost on long distance pipelines is driving the evaluation of higher strength steels such as X80 to X120 in pipeline designs. Benefits are achieved through lower material, transportation and welding costs. However, there are also limitations that have to be considered. The material has very low strain capacity, which is especially critical in applications requiring a strain based design. The strain capacity is also affected by thermal aging over a critical time temperature regime. Strain-based design is required when the stresses and strains exceed the proportional limit, and where the peak design loads will be reduced when the material strains. Typical high performance protective coatings require the heating of the steel pipe to temperature of 230 to 250C for application.

Shaw Pipe Ltd, a wholly owned unit of Bredero Shaw, ShawCor's largest division has recently developed a process to apply a multi-component high performance coating utilizing a pipe preheat temperature of less than 200C for a maximum of 5 minutes. This restriction on the thermal history has been shown to prevent strain aging on the high strength steel. The low application temperature coating (LAT HPCC SE) was enabled by DuPont's development of a Fusion Bonded Epoxy primer that had acceptable properties when applied at the above temperature restriction. The other components of the coating include a tough polyethylene material for damage resistance and an adhesive layer. The coated pipe was successfully used in the construction of TransCanada Pipeline Peerless Lake III Project.

5. Signed on behalf of Company:

6. Name & position in Company: Sean Haberer, Vice President Global Marketing

7. Date: June 4, 2007

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This entry form and any attachments have to be received in Geneva no later than 1st July 2007, addressed to Luc Henriod - Executive Secretary, IPLOCA, Ch. de Blandonnet 2, 1214 Vernier/Geneva, Switzerland or electronically to: info@iploca.com

