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ABSTRACT

The Pennsylvanian Piauí Formation records the deposition of aeolian, fluvial and shallow marine systems accumulated in the intracratonic sag Parnaíba basin. Characterization of the facies associations and sequence stratigraphic framework was done by detailed description and logging of outcrops. Six facies associations were recognized: aeolian dunes and interdunes, aeolian sandsheets, fluvial channels, tidally-influenced fluvial channels, shoreface and shoreface-shelf transition. Through correlation of stratigraphic surfaces, the facies associations were organized in system tracts, which formed eight high frequency depositional sequences, bounded by subaerial unconformities. These sequences are composed of a lowstand system tract (LST), that is aeolian-dominated or fluvial-dominated, a transgressive