

GE Next Generation Locomotive

PROJECT TEAM: Cesar Vergara, National Principal Design, Jacobs (2003-2009)
Lobstein Design (Arlington VA)

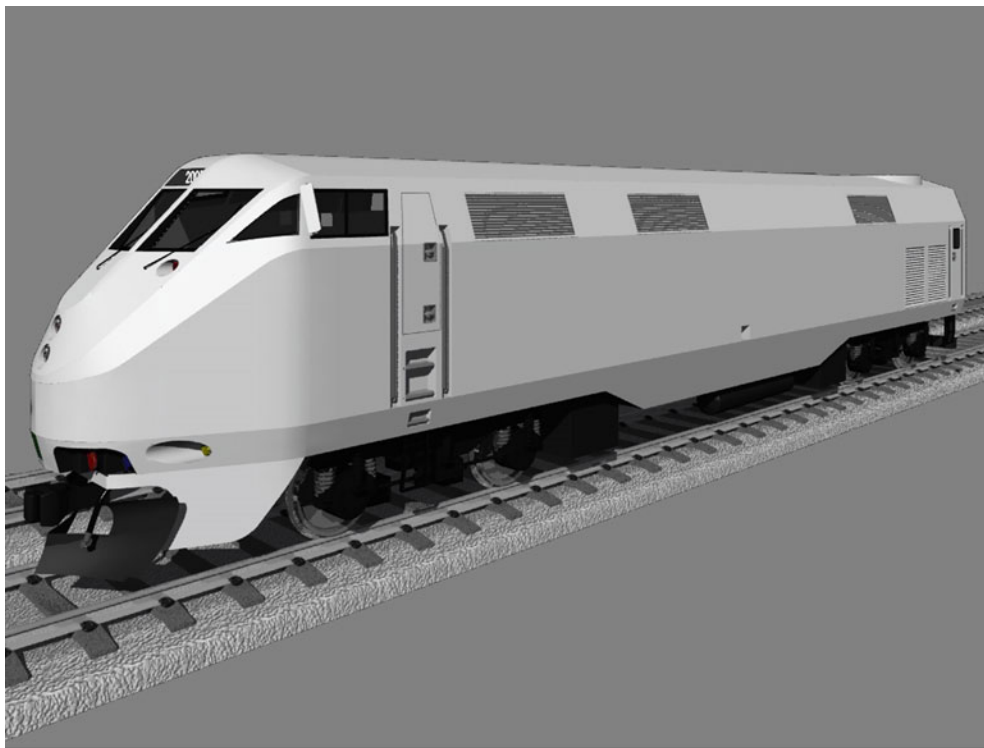
CLIENT: GE Transportation (Erie, PA)

COMPLETION DATE: 2004

In response to an important contract opportunity in Canada, General Electric sought industrial design assistance to configure its next generation diesel-electric passenger locomotive. GE reviewed the design process, led by CESAR VERGARA, that had resulted in its highly successful Genesis locomotive manufactured during the 1990s for Amtrak and VIA Rail Canada. Based on its assessment, GE reached out again to CESAR VERGARA to request he lead the conceptualization and industrial design of the new unit.

CESAR VERGARA spent a week at GE's Erie, Pennsylvania facilities, working directly with the manufacturing and design engineering teams. This immersion created a better understanding of GE's manufacturing and fabrication preferences. A series of scale mock-ups and 3D CAD support finalized the concept.

CESAR VERGARA'S proposal calls for an all-metal design employing sections of cones, cylinders and flat stock to yield a very sophisticated, safety-compliant design. His concept incorporates the latest manufacturing approaches to the monocoque carbody, while meeting additional structural strength requirements.



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