NURBS tessellation adjustment

Introduction
Rendering a NURBS surface in Maya will often produce a faceted outline like this:

This is because Maya tesselates (converts to a polygonal surface) NURBS surfaces so that it can render them. The tessellation values are often too low; this is a short list of what to look for and adjust.

Removing display tessellation

Select the surface and then use Render – Set NURBS Tessellation in the Rendering environment. This resets some parameters but may not make any difference.

Next go to the Attribute Editor and the Shape tab. The two panels you want are NURBS Surface Display and Tessellation.

Open the NURBS Surface Display panel and find the Curve Precision and Crv Precision Shaded sliders. Experiment with raising and lowering these values; in some cases you may find they don’t make any difference to the render quality. In that case set them both to 3.
Next, open the Tessellation panel. This contains several sub panels.

Check the Enable Advanced Tessellation box, then make sure **Per Span # of Isoparms** is set in the **Primary Tessellation Characteristics** mode drop down lists. Then increase the U and V numbers to what produces a good render.

This will probably do it.