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SUBJECT: Aeroderivative Gas Valve Strategy

Over the years, Woodward has developed and maintained several gas valve product families for use in the aeroderivative market with tremendous success. The 3103 and 3171 products have proven themselves countless times as a robust valve with various styles of actuators. The current EM35MR electric actuator and DVP driver with each of the valves provides optimal flow control in all applications.

Not too many years ago, Woodward created a more cost effective product family, the GS6 and GS16, as suitable replacement for the proven in use older products. The intent was that the GS Series with its new package design would enable users a low cost solution for their gas metering applications. Since the release of the GS6 and GS16 products into the market, it is has been identified that the products have some limitations in application as compared to their predecessors.

Going forward Woodward will maintain both families of products (3103 & 3171 and the GS6 & GS16) to provide our customers the option of both a cost effective and severe service design.

3171 with EM35MR and DVP –	1" Severe Service Valve and Actuator
3103 with EM35MR and DVP –	2" Severe Service Valve and Actuator
GS6 with on-board driver –	1" Clean Service Valve and Actuator
GS16 with on/off board driver -	2" Clean Service Valve and Actuator

The differentiation between the "clean" and "severe" service is a complicated discussion with numerous variables of gas properties and applications. Woodward will follow the guidelines below as general recommendations. Please contact your Woodward Account Manager for more detailed discussions on this topic or site specific application questions:

Severe Service Valve Applications - Gas direct from a well, either on land or at sea, or any other direct production, the severe service valves be utilized to reduce the risk for performance issues related to gas cleanliness, precipitants, paraffin, etc.

Clean Service Valve Applications – Gas direct from a well established supply pipe system with proven production fields.

We understand that this message differs from previous statements by Woodward, however, we believe that this clarifies the products intended uses to provide the best possible solution for global gas metering needs. Should you have any questions, comments or concerns, please contact your local Woodward Representative.

## Best Regards,

Wade Burdick Industrial Turbomachinery Product Line Manager WOODWARD Controlling the Power of Energy

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