Electron Cyclotron Heating (ECH): 50 mm Corrugated Waveguide Fabrication

Category: Industrial Equipment

Small Business Set-Aside: No

Estimated Value: > $1M

NAICS Code: 541330

Expected Issue Date: March 2020

Expected Award Date: June 2020

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Detailed Description: The 50 mm corrugated waveguide sections are a part of the Electron Cyclotron Heating and Current Drive (ECH & CD) Transmission Line (TL) subsystem. The 50 mm corrugated waveguide transmits up to 1.2 MW of 170 GHz power from the Gyrotron sources to the plasma with low-loss and high mode purity. The propagating mode purity requirement of 95% HE11 is achieved by maintaining the straightness of the 50 mm corrugated waveguide to 100 μm/m. The maximum 50 mm corrugated waveguide length is 3 meters. Precision coupling assembly allows the waveguides to be mechanically connected during TL assembly. The TL design includes bolted flanges for precise alignment and to form a vacuum seal. The precision alignment of the waveguide coupling must be maintained during operations to ensure acceptable performance.

Please contact the Procurement Officer listed with this requirement for more information and to request placement on the bidder's list.

Last Updated: March 10, 2020 - 12:11 pm