

IBR™

**ENRICHMENT TECHNOLOGY COMPANY
TECHNOLOGICAL PLATFORM.
URENCO & AREVA STATE & DEVELOPMENT
FORECAST**

VOLUME I

**DESIGN & TECHNOECONOMIC PERFORMANCE ATTRIBUTES
OF THE SIX GENERATIONS OF URENCO/ETC GC &
AUXILIARY EQUIPMENT**

INTERNATIONAL BUSINESS RELATIONS LLC

Moscow, 2013

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DEFINITIONS

Gas Centrifuge Capacity (W_{GC})	Maximum capacity of a gas centrifuge in SWU per year attained at an optimal feed flow at the gas centrifuge inlet.
Cascade Installed Capacity (W_I)	Estimated maximum capacity of a cascade hall, i.e. the product of maximum capacity of a gas centrifuge and the number of gas centrifuges in a cascade.
Cascade Nominal Capacity (W_N)	Capacity of a GC cascade in view of capacity loss in an actual cascade versus an ideal cascade, which (capacity loss) is dictated by: <ul style="list-style-type: none"> • The number (percentage) of gas centrifuges failed due to an accident; • Connection diagram of GC inside an actual cascade and feed stream at the inlet to the cascade, which affect the actual value of feed stream at the inlet to each GC¹. <p>A GC cascade of a certain nominal capacity (W_N), can be in a standby mode or in operation or in shutdown state.</p>
Cascade Nominal Operating Capacity (W_{NO})	Nominal capacity of a GC cascade in operation state
Plant Installed/Nominal/Nominal Operating Capacity	Sum of the relevant capacities of all GC cascades installed at a plant
Site Installed/Nominal/Nominal Operating Capacity	Sum of the relevant capacities of all the plants arranged on one site
Probability of emergency outage of a GC or probability of a GC failure	The ratio of the number of GC from the batch of initially installed GC taken out of operation due to accident (failure) to the total number of GC in the initially installed batch.

¹ Given the finite number of (GC) cascade elements it proved impossible to achieve feed stream at the inlet to each GC equivalent to the optimal value. Therefore, in practice GC in a cascade operate in the range of feed streams close to the optimal one but not exactly equal to the optimal value. This, alongside with GC failure, entails capacity loss of an actual cascade versus an ideal one.

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**TECHNOLOGY PLATFORM OF
ENRICHMENT TECHNOLOGY COMPANY.
STATUS AND DEVELOPMENT PROSPECTS OF
URENCO & AREVA & ETC**

VOLUME II

**STATUS AND DEVELOPMENT PROSPECTS OF
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