

CghgYY. DUfUX]Yg ZØf I f`Ui VYf cXYf VYXfc\hY 6cca ncbY3

9f`YVYb`G]Y`X]Y`C ghgYY.`I f`Ui VžI a k Y`h\YfUi gZcfXYfi b[Yb i bX`XYfYb`6YXYi hi b[`ZØf`X]Y`FY[]cb`A YW_`YbVi f[! Jcfdca a Yfb`i bX`XUfØVYf`\]bUi g"



HfUggYb\Y]XYž'8Yi hgW\`UbX'!'8]Y'CghgYYž'Y]b'VY`]YVhYg
I f`Ui Vg[YV]Yhž']gh'b]W\h'bi f'<Y]a Uh'ZØf'j]Y`Y'A YbgW\Yb']b
A YW_`YbVi f[!Jcfdca a Yfb'i bX'GW\`Ygk][!<c`ghY]bž'gcbXYfb
Ui W\'Y]b'ZUgn]b]YfYbXYg'2_cgmghYa ž'XUg'ni bY\a YbX'i bhYf'8fi W_ghY\h''8]Y']Xm``]gW\Yb'GhfÀbXY'i bX'GhY]`_ØghYb'j cb'CfhYb'k]Y
HfUggYb\Y]XY'Ui Z'I gYXca 'n]Y\Yb'A\f`]W\'\i bXYfhhUi gYbXY
6Ygi W\Yf'Ub'i bX'g]bX'Y]b'k]W\h][Yf'K]fhgW\UZhgZU_hcf'ZØf'X]Y
FY[]cb'''8cW\'X]Y'gW\ObYb'6i W\hYb'i bX'XUg'V`Ui Y'K UggYf
j YfVYf[Yb'Y]bY'VYgcf[b]gYffY[YbXY'FYU`]hÀh''

8]d`ca Uh]Y"8]Yg`\Àb[hYb['a]hXYb'Ò_c`c[]gW\Yb
<YfUi gZcfXYfi b[Yb'ni gUa a Ybž'X]Y'j cf'U``Ya 'Xi fW\
Ubh\fcdc[YbY'6Y`Ughi b[Yb'j Yfi fgUW\h'k YfXYb"'8Yf'Xf]hhY
\c`]gh]gW\Y'Ni ghUbXgVYf]W\h'j cb'<9@7CA 'fGhUhY'cZ'h\Y'6U`h]WGYU
&\$&' \L'`Y[h'cZZYbž'XUgg'X]Y'CghgYY']b'_Y]bYa '[i hYb'Ni ghUbX']gh
i bX'-('i 'XYf': `ÀW\Y'Yi hfcd\]Yfh'g]bXž'hfchn'[Ygi b_YbYf
BÀ\fghcZZY]bhfÀ[Y']b'XYb'`YhnhYb'\J\fYb"

2 _c`c[]gWXY'<YfUi gZcfXYfi b[Yb</pre>

6YgcbXYfg'VYgcf[b]gYffY[YbX']gh'XYf'FØW_[Ub['XYf'?UVY''Ui VYghÀbXY'i bX'X]Y'J YfgWX 'YWX hYfi b['XYf'

<Yf]b[dcdi `Uh]cbž'X]Y'i bhYf', VYfZ]gWXi b[ž'GUi YfghcZZa Ub[Y''i bX XYa '?`]a Uk UbXY`''Y]XYh"'8]YgY'J YfÀbXYfi b[Yb'XYi hYb'XUfUi Z\]bž'XUgg'g]WX'X]Y'@YVYbgfÀi a Y'XYf'C ghgYY'XfUa Uh]gWX'j YfÀbXYfh\UVYb'i bX'Yg'j]Y'Y'\\fnY\bhY'XUi Yfb'_\ObbhYž'V]g'k]YXYf'Y]b
[i hYf'Ni ghUbX'YffY]WX h'k]fX"

8]YFc``Yjcb'Hcif]gaigibXlakY`hV]`Xib[

 $8]Y C ghgYY VY]V hXY bbcWX Y]b GY bgi WX hgcfh ZØf Hci f]ghY b"' \Rightarrow f k]fhgWX UZh`]WX Yf K Yfh']gh'i bVYghf]hhY bž XU nU\`fY]WX Y':]gWX Yfž Hci f]ga i gi bhYfbY\a Yb'i bX'K]ggY bgWX UZh`Yf Ui Z'X]Y'[Ygi bXY i bX'bUWX \U`h][Y'Bi hni b['XYf FY[]cb'Ub[Yk]YgYb'g]bX"' 8 Ug I a k Y`hVi bXYgUa h'g]Y\h']b'XYa 'U_hi Y``Yb'6Yf]WX h'Y]bY Xf]b[YbXY'5i ZZcfXYfi b[ž'XYb'&$&%'VYgWX`cggYbYb CghgYYU_h]cbgd`Ub'U_h]j 'i a ni gYhnYb"'8]Yg'gc```X]Y'Ò_c`c[]gWXY$

G]hi Uh]cb']b'XYf'CghgYY'`Ub[Zf]gh]['jYfVYggYfb"

5b[Yg]Wkhg'XYf'ghY][YbXYb'A Ø``a Yb[Yb'Ub'GhfÀbXYbž]bgVYgcbXYfY'jcb'`UbXVUg]YfhYb'?ibghghcZZeiY``Ybž']gh'Ui»YfXYalakY`hV]`Xib['ibYf`Àgg`]Wk"'8]Y'GYbg]V]`]g]Yfib['XYf'If`UiVYfibX'5bkc\bYf'ZØf'bUWk\U`h][Yg'JYf\U`hYb'ibX'X]Y'6YXYihib['Y]bYg'[YgibXYb'aUf]bYb'²_cgmghYag']gh'Y]b'GWkf]hh']b'X]Yf]Wkh][Y'F]Wkhib["

±0.5 b V Y h f U W \ h ` X] Y g Y f ' < Y f U i g Z c f X Y f i b [Y b ` V ` Y] V h ` X] Y ` C g h g Y Y ` Y] b C f h ' j c `` Y f '? c b h f U g h Y " K À \ f Y b X ' g] Y ` I f ` U i V Y f ` U b ` c W_h ž ' Y f Z c f X Y f h] \ f Y ` N i _ i b Z h ` Y] b ` Y b [U [] Y f h Y g ' < U b X Y ` b ' j c b ` D c `] h] _ ž ` K] g g Y b g W \ U Z h i b X '; Y g Y `` g W \ U Z h ž i a ` X] Y g Y g ` k Y f h j c `` Y ' ² _ c g m g h Y a ` n i ` g W \ Ø h n Y b i b X ' n i ` V Y k U \ f Y b "

8 Y hU]`g	
Cfh	HfUggYb\Y]XYž'8Yi hgW\`UbX
EiY``Yb	• k k k "bXf"XY
	• k k k "i a k Y`hVi bXYgUa h"XY

6Ygi WXYb G]Y i bg Ui Z Y]bY!fY]gY "XY