

A]hhY`A i gYi a . : † [YbX`]W\Y`Yf`YVYb B Uh]cbU`gcn]U`]ga i g`]bhYfU_h]j

8]Y`6Yn]f_gVØf[Yfa Y]ghYf]b`j cb`A]hhYž`GhY ZUb]Y`F Ya `]b[Yfž
]bZcfa]Yfh`ØVYf`Y]b`VYgcbXYfYg`5b[YVch`XYg`A]hhY`A i gYi a gž`XUg`j
ca`% - ``V]g`ni a`&`"5dfj`ghUhhZ]bXYb`k]fX" † [YbX`]W\Y`UVYb`XUVY`X]Y`A Ò[`]W\Y]hž`Ub`Y]bYa
H\YUhYfVYgi W\`i bX`K cf_g\cd`hY]`ni bY`a Ybž`XYf`g]Y`Ub`X]Y`5i gY]bUbXYfgYhni b[`a]h`XYa`B Uh]cbU`gcn]U`]ga i g
`YfUbZØ\fh"8 UVY]`k]fX`b]W\h`bi`f`X]Y` ; YgW\W\hY`XYg`BG!
HYffc fg`VY`Yi W\hYhž`gcbXYfb`Ui W\`XYf`I a [Ub[`a]h`9f]bbYfi b[g_i`hi`fi`bX`U_hi`Y`Yb`[YgY`gW\UZh]W\Yb
<YfUi gZcfXYfi b[Yb`h\Ya`Uh]g]Yfh"8 Ug`Dfc`Y`hž`Xi`fW\ [YZØ\fh`j`cb`XYb`Di`ddYbgd]Y`Yf]b`Gi`g]`7`Ui`gi`bX`XYf`6]`X\Ui`Yf]b`GhY`Z_U`5a`a`cbž`V]YhYh`Y]bY`Y]bn][`Ufh][`Y`A`Ò[`]W\Y]hž`gW\k`]
]Yf][`Y`H\Ya`Yb`Ui`Z`gd]Y`Yf]gW\Y`i`bX`ni`[`Àb[`]W\Y`K`Y]gY`ni`YfZc`fgW\Yb"8]Y`ϕgnYb]Yfi b[`a]h`XYa`H]hY`' ` ' ž' (ž')
K`Ybb`U`Yg`Ui`gY]bUbXYfZÄ`h` / Ua`d`Λ`Y`d/

8]Y`6Yn]f_gVØf[Yfa Y]ghYf]b`j cb`A]hhYž`GhY ZUb]Y`F Ya `]b[Yfž
]bZcfa]Yfh`ØVYf`Y]b`VYgcbXYfYg`5b[YVch`XYg`A]hhY`A i gYi a gž`XUg`j
ca`% - ``V]g`ni a`&`"5dfj`ghUhhZ]bXYb`k]fX" † [YbX`]W\Y`UVYb`XUVY`X]Y`A Ò[`]W\Y]hž`Ub`Y]bYa`H\YUhYfVYgi W\`i bX`K cf_g\cd`hY]`ni bY`a Ybž`XYf`g]Y`Ub`X]Y`5i gY]bUbXYfgYhni b[`a]h`XYa`B Uh]cbU`gcn]U`]ga i g`YfUbZØ\fh"8 UVY]`k]fX`b]W\h`bi`f`X]Y` ; YgW\W\hY`XYg`BG!
HYffc fg`VY`Yi W\hYhž`gcbXYfb`Ui W\`XYf`I a [Ub[`a]h`9f]bbYfi b[g_i`hi`fi`bX`U_hi`Y`Yb`[YgY`gW\UZh]W\Yb
<YfUi gZcfXYfi b[Yb`h\Ya`Uh]g]Yfh"8 Ug`Dfc`Y`hž`Xi`fW\ [YZØ\fh`j`cb`XYb`Di`ddYbgd]Y`Yf]b`Gi`g]`7`Ui`gi`bX`XYf`6]`X\Ui`Yf]b`GhY`Z_U`5a`a`cbž`V]YhYh`Y]bY`Y]bn][`Ufh][`Y`A`Ò[`]W\Y]hž`gW\k`]
]Yf][`Y`H\Ya`Yb`Ui`Z`gd]Y`Yf]gW\Y`i`bX`ni`[`Àb[`]W\Y`K`Y]gY`ni`YfZc`fgW\Yb"

8]Y`ϕgnYb]Yfi b[`a]h`XYa`H]hY`' ` ' ž' (ž')`K`Ybb`U`Yg`Ui`gY]bUbXYfZÄ`h`VUg]Yfh`Ui`Z`\]ghcf]gW\Yb`9fY][`b]ggYb`ja`6Yn]f_g

A]hhYžk]Y`XYa `K YXX]b[Yf`6`i ha U]`%- &- `i bX`XYf`8YdcfhUh]cb
j cb`ØX]bbYb`i bX`ž XYb`nk]gWXYb`%- (&i bX`%- ((j ca
; ØhYfVU\`b\cZA cUV]h" `b`XYb`K cf_g\cdg`UVYb`X]Y`HY]`bY\`a Yf
X]Y`; Y`Y[Yb\`Y]hž`dfU_h]gWXY`9fZU\`fi b[Yb`ja `:][i fYbh\`YUhYf`Vnk "
gnYb]gWXYa `Gd]Y`i bX`]b`XYf`5fW]j UfVY]h#`ci fbU`]ga i g`ni
gUa a Y`b"G]Y`k YfXYb`XUni `Yfa i h][hž`Y][YbY`F`YWYfWYb
Xi fW`ni ZØ\`fYb`i bX`V]c[fUd\`]gWXY`HYI hY`Ui Z`X]Y`5fVY]h`a]h
Di ddYb`ni `ØVYfhfU[Yb`"8 Ug`5b[YVch`k]fX`j cb`XYf
GYbUhgj Yfk U`hi b[`ZØf`?i `hi fi bX`; YgY`gW`UZh]WXYb
Ni gUa a Yb\`U`h[YZØfXYfh`i bX`]gh`HY]`XYg`?]5!Dfc[fUa a g`ni f
: ØfXYfi b[`j cb`?]bXYf!ž`ž [YbX`i`i bX`Di ddYb`h\`YUhYfb`gck]Y
5_hYi fYb`ja `6YfY]WXY`XYf`DYfZcfa]b[`5fhg`ZØf`Y]b`↑ b[Yg
Di V`_i a "

8]Y`HYfa]bY`ZØf`X]Y`J YfUbgH`hi b[Yb`g]bX`k]Y`Zc`[h
`H\`YUhYfUi ZØ\`fi b[.: fY]hU[ž`%- "'5df]`&\$&(ž`%\$`%`i \`fi bX
%)`%*`i \`f
`K cf_g\cd.`A cbhU[ž`&&"5df]`&\$&(ž`%\$`%+`i \`fi bX`8]YbghU[ž
&`"'5df]`&\$&(ž`%\$`%+`i \`f
C fh`A]hhY`A i gYi a ž`DUb_g`hfU» Y`(+ž`%'`') +`6Yf`]b"
9]bY`5ba Y`Xi b[`]gh`YfZcfXYf`]WXY`ž`YXcW`]gh`XYf`9]bhf]hh`ZfY]"
K Y]hYfY`bZcfa Uh]cbYb`g]bX`ØVYf`X]Y`A YX]Yb`_cbhU_hghY`Y`XYg
6Yn]f_gUa hg`A]hhY`i bhYf`_`_i`hi fa]hhY`cXYf`dYf`9!A U]`i bhYf
dfYggY4 VU!a]hhY"VYf`]b"XY`Yf\`A`h]WXY"

<]ghcf]gWXY`9fY][b]ggY`k]Y`XYf`K YXX]b[Yf`6`i ha U]`%- &- `i bX`X]Y
8YdcfhUh]cb`j cb`ØX]bbYb`i bX`ž XYb`j ca `; ØhYfVU\`b\cZA cUV]h
k A\`fYbX`XYg`BUh]cbU`gcn]U`]ga i g`j YfXYi h]WXYb`X]Y
J YfUbnk cfhi b[ž`g]WXY`a]h`XYf`; YgWXY`hY`Ui gY]bUbXYfni gYhnYb
i bX`X]Y`9f]bbYfi b[`k UWXY`ni \`U`hYb`"8i fWXY`_fYUh]j Y`i bX
]bhYfU_h]j Y`5bg`ÀhnY`k]Y`Di ddYb`h\`YUhYf`i bX`K cf_g\cdg`_ØbbYb
ž [YbX`]WXY`Ui Z`Y]bY`gd]Y`Yf]gWXY`K Y]gY`ni f`F`YZY_h]cb`Ub[YfY[h
k YfXYb"

pHYfa]b`pJ YfUbgH`hi b[`pNY]h`p
p !p !p p
p%- "'5df]`&\$&(`p`H\`YUhYfUi ZØ\`fi b[`p`%\$`%`i \`f`p
p%- "'5df]`&\$&(`p`H\`YUhYfUi ZØ\`fi b[`p`%)`%*`i \`f`p

p&&"`5dfj`&\$\$(`pK cf_g\cd`p%\$ %+`l `f`p
p&' "`5dfj`&\$\$(`pK cf_g\cd`p%\$ %+`l `f`p

EiY`Y. k k k "VYf`]b"XY

8YhU]`g

6Ygi W\Yb`G]Y`i bg`Ui Z.`a Y]b!VYf`]b"bYh