

B Yi gYY`UbXg`BUhi fk i bXYf. : ^cfXYž
J i ` _UbY`i bX`A Ucf]! ? i `hi f` \Ui hbU\
Yf`YVYb`°

9bhXYW_Yb`G]Y`X]Y`UhYa VYfUi VYbXYb`BUhi fk i bXYf
B Yi gYY`UbXg. j cb`a U`YghAh]gWYb : ^cfXYb`i bX`J i ` _UbYb`V]g
ni `Y]bn][Ufh][Yf`H]Yfk Y`hi bX`A Ucf]! ? i `hi f` "9fZU`fYb`G]Y
a Y`f`ØVYf`bUW` \U`h][Yb`Hci f]ga i g`i bX`dfU`_h]gWY
F Y]gYh]ddg"



B Yi gYY`UbXž`Y]b`@UbX`Ua` F UbXY`XYf`K Y`hž`]gh`Y]b`DUfUX]Yg`ZØf
BUhi f`]YV` \UVYf`i bX`5VYbhYi fYf`"5i Z`nk Y]`<Ui dh]bgY`bž`X]Y`j cb
XfUa` Uh]gWYb`@UbXgW`UZhYb`[YdfÄ[h`g]bXž`Z]bXYb`g]W`Y]b][Y`XYf
VYY]bXfi`W`_YbXghYb`BUhi fk i bXYf`i bgYfYg`D`UbYhYb`"J cb
gW`bYYVYXYW`_hYb` ;]dZY`b`ØVYf`ga UfU[X[fØbY : ^cfXY`V]g` \]b`ni
VfcXY`bXYb`[Ych`Yfa` U`Yb`E i Y`Yb` `X]YgYg`@UbX`gWY]bh`k]Y`Ui g
Y]bYf`UbXYfYb`NY]h`8]Y`=gc`Uh]cb`ja`GØXdUn]Z]_` \Uh`Y]bY
Y]bn][Ufh][Y : ^cfU`i bX : Ui bU` \Yfj`cf[YVfUW`hž`X]Y`Yg`b]f[YbXk`c
gcbghni`YbhXYW`_Yb`[]Vh" : Øf`F Y]gYbXY`]gh`B Yi gYY`UbX`b]W`h`bi`f
Y]b`N]Y`ž`gcbXYfb`Y]bY`F Y]gY`ni`XYb`l`fgdfØb[Yb`XYf`9fXYž`k`c`X]Y

?fÅZhY`XYf`BUhi f`]b`j`\fYf`fc`YghYb` : cfa`gdØfVUf`g]bX`"K Yf
\
Yf\
Yf`ca`a`hž`k`]fX`a`]h`9f`YVb]ggYb`VY`c`\
b`hž`X]Y`k`Y]h`ØVYf`XUg
\
]bUi`g[Y\
Yb`ž`k`Ug`K`cfhY`VYgW`fY]VYb`_ØbbYb`"HUi`W`Yb`G]Y`Y]b`]b`
Y]b`Y`K`Y`hž`X]Y`G]Y`a`]h`YXYa`5hYa`ni`[`]b`]\
fYb`6Ubb`n]Y`h`"

9]bZØ`fi`b[`]b`X]Y`BUhi`fk`i`bXYf`
B`Yi`gYY`UbXg`



GhY`Yb`G]Y`g]W`j`cfž`G]Y`ghY`Yb`Ub`Y]bYa`C`fhž`k`c`X]Y`9fXY`gY`Vgh
ni`Uha`Yb`gW`Y]bh`k`c`J`i`_UbY`ZØghYfbž` ;`YhgW`Yf`_b]fgW`Yb`i`bX
XUg`A`YYf`]b`hØf`_]gZUfVYbYb`HØbYb`Yi`W`hYh`"B`Yi`gYY`UbX`Yb`hZU`hYh
gY]bY`@UbXgW`UZhYb`k`]Y`Y]b`YVYbX][`Yg` ;`Ya`Å`XYž`XUg`j`cb`XYf`
i`bVÅbX][`Yb`?`fUZh`XYf`BUhi`f`[`YnY]W`bYh`k`i`fXY`"5i`ZXYb`VY]XYb
<`Ui`dh]bgY`bž`X]Y`g]W`k`]Y`Y]b`nYf`_ØZhYhYf`HfUi`a`Ui`g`XYa
GØXdUn]Z]_`Yf`YVYbž`k`YW`gY`b`g]W`XfUa`Uh]gW`Y`GnYbYf]Yb`]b
Y]bYa`UhYa`VYfUi`VYbXYb`HYa`dc`UV`"J`cb`XYb`gW`fcZZb` ;`]dZY`b
XYf`GØX`]W`Yb`5`dYb`V]g`ni`XYb`gUbZhYb`<Ø[`Y`b`XYf`B`cfX]bgY`
V]YhYh`X]YgYg`@UbX`Y]bY`J`]Y`ZU`hž`X]Y`XYb`5hYa`fUi`Vh`>XY`F`Y`[`]cb
Yfn`Å`h`Y]bY`Y][`YbY` ;`YgW`]W`hYž`[`Y`Zcfa`h`Xi`fW`A`]"`]cbYb`&Y`fY`
[`Yc`c`[`]gW`Yf`I`a`k`Å`ni`b[`Yb`i`bX`Y]bYf`=gc`Uh]cbž`X]Y`Y]bY`
i`bj`Yf[`Y]W`]W`Y`5fhYbj`]Y`ZU`h`Yfj`cf[`YVfUW`h`h`Uh`"

6Y[]bbYb'k]f'ja 'BcfXYbž'k c'X]Y'6UmicZ'g'UbXg'a]h'ØVYf'%(\$
_Y]bYb'9]UbXYb'cW_h"<]Yf['Y]hYb'MJW'hYb'i bX'GYU_U'g'Xi fW
fi \][Y'; Yk ÅggYfž'k Å\fybX'i bhYf'XYf'C VYfZÅWY'Y]bY
ZUfVYbZfc\Y'i bhYfk UggYfk Y'h'Ui Z'HUi W\Yf'i bX'GWkbcfW'Yf
k UfhYh"K Y]hYf'gØX']Wž'Ui Z'XYf'GØX]bgY'ž'Yf\YVh'g]W'XYf'A]Zcfx
Gci bX'k]Y'Y]b'A cbi a Ybh'XYf'9]gnY]h"J cb'; 'YhgWYfb'[YZcfa hY
: Y'gk ÅbXY'fU[Yb'ghY]'Ui g'XYa 'K UggYfž'k Å\fybX'K UggYfZÅ'Y'k]Y
g]VYfbY': ÅXYb'\YfUVghØfnYb"'6cchgZU\fhYb'Ybh\Ø'Yb'X]Y'A U[]Y
X]YgYg'c fhYgž'cZi'U'g'UW'hYg'K Y'hk i bXYf[YZY]Yfhž'i bX'UXYb'XUni
Y]bž'X]Y'Gh]'Y'nk]gWYb'XYb'6Yf[Yb'ni 'gdØfYb"'B]W'h'k Y]h
YbhZYfb'h'gW'a]Y[Yb'g]W'X]Y': c! ! i bX': fUn! ægYZ; 'YhgWYf'Ub
X]Y'K Ygh_ØghYž'VYY]bXfi W_YbX'ni [Åb['W'ZØf'K UbXYfYf'i bX
: 'i [gUZUf]gž'X]Y'Y]bYb'6'W'Ui Z'X]YgY'gW'k]bXYbXYb';][UbhYb
Ui g'9]g'Yf\UgWYb'a ØW'hYb"

8cW'BYi gYY'UbX'nY][h'g]W'b]W'h'bi f'j]b'_Ø\`Yb'< Ø\Ybž'gcbXYfb
Ui W']b'VfcXY'bXYf'H]YZ"'8Yf'7\Ua dU[bY'Dcc''b'K U]!C!HUdi ž
Y]bY'\Y]»Y'E i Y''Yž'X]Y'j cf'+\$\$'Å\fyb'Xi fW'\mXfch\Yfa U'Y
?fÅZhY'YbhghUbXž'gW]a a Yfh']b'gi ffYU'Yb': UfVYb'i bX'Yf]bbYfh'Ub
X]Y'j i '_Ub]gWY'9bYf[]Y'i bhYf'XYf'9fXcVYfZÅWY"'9VYbgc
ZUgn]b]YfYbX'g]bX'X]Y'K U]hca c!< Ø\`Ybž'k c'Y]bY'Y]bn][Ufh][Y
; 'Ø\k Øfa WYbUfhž'5fUWkbcWJa dU'@ a]bcgUž'X]Y'8i b_Y'\Y]h]b
Y]b'GhYfbYba Yf'j Yfk UbXY'h''9]bY'6ccghci f'Xi fW'X]YgY
i bhYf]fX]gWYb'; Åb[Y'ZØ\`h'g]W'Ub'k]Y'Y]bY'FY]gY']b'Y]bY'UbXYfY
8]a Ybg]cb"'K Yf'\]b[Y[Yb'_UfYž'YVYbX][Y': UfVYb'gi W'hž'Z]bXYh
g]Y'VY]XYb'6'i Y'Dcc'g'Ua '< UUgh'DUggž'k c'['YhgWYf[YgdY]ghYg
K UggYf']b'ghfU\YbXYa '6'Ui ''Yi W'hYhž'YffY]WVUf'ØVYf'Y]bYb
_i fnYbž'a U'Yf]gWYb'GdUn]Yf[Ub["

8]Y'?ØghYb'XYg'@UbXYg'VYf[Yb'YVYbZU''g'; Y\Y]a b]ggYž'k]Y'X]Y
DUbWU_Y'F cW_g']b'Di bU_U_]ž'k c'?U'_ghY]bZcfa Uh]cbYb'Xi fW
9fcg]cb'ni '[YghUd'Y'hYb' DZUbb_i WYb '[YZcfa h'k i fXYb"'6Y]': 'i h
V]YhYb'g]Y'Y]bY'gdY_hU_i 'ÅfY'G\ck ž'k Ybb'XUg'A Yf'k UggYf'Xi fW
GdU'hYb'gW]Y»h''9VYbgc'a mgh]gW'k]f_Yb'X]Y'A cYfU_]6ci 'XYfg
VY]'8i bYX]bž'_i [Y'ZØfa][Y': Y'gVfcW_Ybž'X]Y'j cf'fi bX'* \$
A]''cbYb'Å\fyb'YbhghUbXYb'i bX'\Yi hY'k]Y'FY']_hY'Y]bYf
j Yf[YggYbYb'NY]h'Ua '?cY_c\Y'6YUW''Y[Yb"' : Øf'Y]bYb'<Ui W
j cb'9k][_Y]h'ZØ\fh'XYf'K Y[]b'XYb'K U]dci U': cfYghž'k c'HUbY

A U\i hUz'XYf'\ØW ghY' ? Ui f]!6Ui a 'BYi gYY'UbXgž'gY]h'V]g'ni '&") \$\$
>\fYb'ØVYf'XYb'K U'X'k UW'h"

⊕a]hhYb'X]YgYf'J]Y'ZU'h'gW]a a Yfb'GYyb'k]Y'ž k Y'Yb']b'XYf
@UbXgW UZh'"@U_Y'A Uh\Ygcb'gd]Y[Y'h'X]Y'i a ']Y[YbXYb'; 'YhgW]Yf
]b'gh]'Yb'A ca YbhYbž'k Å\fybX'@U_Y'HY_Udc']a 'A UW_Ybn]Y
7ci bhfm'a]hgY]bYf'hØf_]gZUfVYbYb'DfUW'h'i bX'gY]bYf'6YXYi hi b[
ZØf'X]Y'K UggYf_fUZh'VYY]bXfi W_h'"B]W'h'k Yb][Yf'VYY]bXfi W_YbX
hcgYb'X]Y'<i _U': U'g'VY]HUi dcž'k c'&&"\$\$\$\$'@]hYf'K UggYf'dfc
GY_i bXY'Xi fW'Y]bY'Yb[Y'GW'ì W'h'ghØfnYb' 'Y]b
BUhi fgWUi gd]Y'žXUg'j cb'5i gg]W'hgd'UhhZcfa Yb'cXYf'dYf'6cch
Yf'YVh'k YfXYb'_Ubb'"K UbXYfYf'k]YXYfi a 'n]Y'h'Yg'ni a 'Hcb[Uf]fc
5'd]bY'7fcgg]b[ž'Y]bYa 'HU[Ygk Y[ž'XYf'Xi fW'j i ' _Ub]gW]Y
@UbXgW UZhYb'i bX'Ub'ga UfU[X[fØbYb'GYyb'j cfVY]ZØ\fhž'ghYhg
VY['Y]hYh'j cb'XYf'fUi Yb'GW'Øb\Y]h'U_h]j Yf'J i ' _UbY"

9]b'k Y]hYfYg'NYbhfi a 'XYf'BUhi fYf'YVb]ggY']gh'E i YYbghck b'Ui Z
XYf'GØX]bgY'ž'Y]b[YVYhhYh']b'Y]bY'FY[]cbž'X]Y'5VYbhYi Yf'i gh][Y
Ui g'U'Yf'K Y'h'Ubn]Y'h"i a [YVYb'j cb'a U'YghÅh]gW]Yb'6Yf[Yb'ì bX
XYa ' @U_Y'K U_Uh]di ž'XYa 'Xf]hh[fØ» hYb'GYy'XYg'@UbXYgž'V]YhYh
X]Y'; Y[YbX'b]W'h'bi f'UhYa VYfUi VYbXY'5i gV']W_Yž'gcbXYfb'Ui W
5_h]j]hÅhYb'k]Y'6i b[YY!ž a d]b['Ub'XYf'? Uk UfUi !6fØW_Y'cXYf
K UbXYfb'ì bX'A ci bhU]bV]_Yb'"J cb'6cV g'DYU_ž'YffY]W]VUf'a]h'XYf
G_m]bY'; cbXc'Už'Yf'ØZbYh'g]W'Y]b'DUbcfUa Už'XUg'X]Y'GYy'Y
VYfØ\fh"' : Øf': Ub'g'XYf' <Yff'XYf'F]b[Y !Hf]'c []Y']gh'X]Y'FY[]cb'Y]b
D][Yfcfhž'XU'j]Y'Y'8fY\cfhY']b'XYf'BÅ\Y'']Y[Ybž'k]Y'a Ub'VY]Y]bYf
9f_i bXi b[ghci f'gY'Vgh'YbhXYW_Yb'_Ubb'fGhi X]YbFY]gYb
E i YYbghck b'Ł"

8]Y'@UbXgW UZhYb'BYi gYY'UbXg'g]bX'b]W'h'bi f'? i ']ggYbž'gcbXYfb
'VYybX][Y'NYi [b]ggY'XYf'9fX [YgW]W'hYž'X]Y'g]W']b'YXYa 'K]b_Y'
cZYbVUfYb'"J cb'[Ych\Yfa U'Yb'K i bXYfb'V]g'\]b'ni 'i fU'hYb
K Å'XYfb' 'YXY'9W_Y'X]YgYg'@UbXYg'ÅXh'XUni 'Y]bž'X]Y'J]Y'ZU'h'XYf
BUhi f'a]h'Y][YbYb'5i [Yb'ni 'Yf'YVYb'ì bX']\fY'; YgW]W'hYb'ni
\ØfYb"

8]Y `VYY]bXfi W_YbXYb : ^cfXY



9]b : `ØghYfb`XYf`9]gnY]h`U`h`Xi fW`X]Y`gW`a U`Yb`K UggYfk Y[Y
XYg`GØXk YghYbg`BYi gYY`UbXgž`k c`X]Y : ^cfXY`XYg :]cfX`UbX!
BUh]cbU`dUf`_g`k]Y`BUfVYb`Y]bYf`i fU`hYb`K Y`h]b`X]Y`?ØghY
[YgW`b]hhYb`g]bX`"8]YgY`FY[]cbž`X]Y`g]W`ØVYf`%&") +\$
E i UXfUh`_]ca YhYf`YfghfYW`_hi bX`gY]h`%- , *`ni a`I B9G7C!
K Y`hbUhi fYfVY`nÅ`hž`V]f[h`@UbXgW`UZhYbž`X]Y`gc`XfUa`Uh]gW`
k]f`_Ybž`U`g`Å`hY`X]Y`BUhi f`gY`Vgh`Y]f`Y`fY`[fØ» hY`6Ø`bY
Yff]W`hYh`"a`<YfnYb`X]YgYg`[Yk`U`h][Yb`GW`i hn[YV]Yhgž`XUg`U`g
[fØ» hYf`BUh]cbU`dUf`_XYg`@UbXYg`[]hž`fU[Yb`6Yf[Y`V]g`ni`"+"&
A YhYf`]b`XYb`<]a`a`Y`ž`k`Å`fYbX`h]YZYž`cb`;`YhgW`Yfb`[YZcfa`hY
6i`W`hYb`XUg`A`YYf`]b`X]Y`9fXY`n]Y`Yb`" <]Yfž`ZYfbUV`XYf`<Y`_h]`_XYf`
K`Y`hž`gW`Y]bh`X]Y`NY]h`gh`"ni`ghY`Ybž`bi`fi`bhYfVfcW`Yb`j`ca
F`Ui`gW`Yb`XYf`K`UggYfZ`"Y`i`bX`XYa`GW`fY]`gY`hYbYf`J`Ø[Y`"

8Yf`A`]ZcfX`Gci`bXž`cXYf`D]cd]chU`]ž`k`]Y`]`b`X]Y`A`Ycf]`bYbbYbž
Yf`YVh`g]W`U`g`?`fcb`↑`k`Y`X]YgYf`FY[]cb`"GW`a`U`Y`K`UggYfk`Y[Y
k`]bXYb`g]W`nk`]gW`Yb`ghY`Yb`?`]ddYbž`X]Y`V]g`ni`"%`&\$`\$`A`YhYf`
gYb`_fYW`h`Ui`g`XYa`A`YYf`Ui`ZfU[Ybž`k`Å`fYbX`i`bnÅ`_]Y
K`UggYfZ`"Y`k`]Y`g]`VYfbY`GW`Y]Yf`Y`fUVghØfnYb`"6YgcbXYfg`bUW`
FY[YbZ`"Yb`"i`bX`XUj`cb`[]Vh`Yg`Y]f`ØVYf`&\$`\$`HU[Y`]a`"Y`f`
j`Yfk`UbXY`h`g]W`XYf` : ^cfX`]b`Y]b`GW`Ui`gd]Y`Ui`g`hcgYbXYa`

K UggYf'i bX'gW]a a YfbXYa 'BYVY''6cchgZU\fhYb '[`Y]hYb'Xi fW
X]YgY'gi ffYU`Y`K Y'hž'cZi'VY[`Y]hYh'j cb'8Y`Z]bYb'cXYf
BYi gYY`ÀbX]gW]Yb'GYV`V`fYbž'X]Y`bYi []Yf][`bYVYb'XYb'GW]ZZYb
Ui ZhUi W]Yb''8Yf'5bV`]W`XYg'A]hfY`DYU`ž'XYf'k]Y`Y]b`K`ÀW]hYf
ØVYf'XYa`K UggYf'h\fc bž'df`À[h'g]W]i bUi g`ÒgW]`W]`]bg
; YX`ÀW]hb]g`Y]b"

K Y]hYf'gØX`]W]ž'UV[YgW]YXYbYf'i bX'k Yb][Yf'VYgi W]hž`]Y[h'XYf
8ci VhZ `Gci bXž'Ui W]DUhYU'[YbUbbh''; fØ»Yf'i bX'k]XYf'U`g`gY]b
VYfØ\`a hYf'BUW]VUfž'YfghfYW]h'Yf'g]W]`ØVYf'Y]bY`@Àb[Y]j cb'(\$
?)`ca YhYfb'i bX'VYY]bXfi W]h'a]h'Y]bYf'Gh]`Yž'X]Y`ZUgh[fY]ZVUf'gh'
I a [YVYb'j cb'X]W]hYa`FY[Ybk U`Xž'XYf'g]W]`V]g'ni f'6Ui a [fYbnY
]b`%\$\$\$`A YhYfb`<Ø\Y`YfghfYW]hž'k]f_h'X]YgYf':`čfX'k]Y`Y]b
FØW]ni [gcfh'XYf'BUhi f''8Yf'Ni [Ub[`YfZc'XYfh'a Y`f'5i Zk UbX`
Y]bY`6cchgZU\fh'ØVYf'XYb`@U`Y`A UbUdci f]'i bX'Y]bY': U\fh'ØVYf
XYb`K]`a ch'DUgg'g]bX'bØh][`ž'XcW]`X]Y`6Y`c`bi b[`]gh'Y]bY
i bVYfØ\fhY`9]bgUa `Y]hž'X]Y`bi f'k Yb][Y`Yf'YVYb''<]Yfž'k c`X]Y
6Yf[Y`g]W]`ja`gh]`Yb`K UggYf'gd]Y[Y`bž'gW]Y]bh'X]Y`K`Y`h]b`Y]bYa
Ni ghUbX]j`Ø`][Yf`<Ufa cb]Y`ni`j`Yf`UffYb"

8]Y`9b hghY\i b[`X]YgYf':`čfXY`Yfn`À\`h'j cb'Y]bYf'NY]hž'U`g
[Yk U`h][Y':`YhgW]Yf'XUg`@UbX`Ui g\Ø\`hYb'i bX'h]YZY`H`À`Yf
\]bhYf']Y»Ybž'X]Y`gd`ÀhYf'j ca`A`YYf'[YZi hYh'k i fXYb''8Yf'6Y[f]ZZ
Gci bX`ž'XYb`Vf]h]gW]Y`9bhXYW]Yf`Z`À`gW]`W]Yfk Y]gY
j Yfk YbXYhYbž'h`Ài gW]h'ØVYf']\fY`k U\fy`BUhi f`\]bk Y[`Yg'g]bX
YW]hY':`čfXYž'k]Y`g]Y`]b`]\fYf'XfUa`Uh]gW]Yb'DfUW]h'bi f'gY`hYb'ni
Z]bXYb'g]bX''K`Yf'a Y`f'ØVYf'X]YgY'[Yc`c[]gW]Yb`K i bXYf'YfZU\fyb
a`ØW]hYž'Z]bXYh'ZUgn]b]YfybXY`9]bV`]W]Y`VY]`7Y`Y`Vf]hm'7fi`jgYgž
X]Y`X]Y`6YgcbXYf\Y]hYb'XYf'bYi gYY`ÀbX]gW]Yb':`čfXY
Y]bXfi W]gj c``VYgW]fY]VYb''8]Y`fc`Y`?fUZhž'X]Y`X]YgY
@UbXgW]UZhYb`Zcfa`hYž']gh'bcW]`Yi hY`gdØfVUfž'VYgcbXYfg'k Ybb
a`Ub`X]Y`Gi h\Yf`UbX': U`g`cXYf'6fck bY': U`g`VYhfUW]hYhž'X]Y`a`]h
ØVYf') \$\$\$`A YhYfb`<Ø\Y`ni`XYb`\ØW]ghYb`K UggYfZ`À`Yb`XYg`@UbXYg
n`À\`Yb"

BYVYb`XYf'ØVYfk`À`h][YbXYb'; Yc[fUd\]Y`V]f[h'XYf':]cfx`UbX!
BUh]cbU`dUf`_Y]bY`Ø_c`c[]gW]Y`J]Y`ZU`hž'X]Y`YVYb'gc`VYY]bXfi W]h'
, VYf'+\$\$\$`DZUbnybUfhYbž'j]Y`Y`XUj cb`YbXYa]gW]ž'[YXY]\Yb`]b

XYb`[Ya Å»][hYb`FY[Ybk Å`XYfbž`XUfi bhYf`X]Y`a U`YghÅh]gWXYb
GWXY]bVi WXYbž`X]Y`XYb`l bhYf[fi bX`a]h`Y]bYa`X]W`hYb`[fØbYb
HYdd]W`ØVYfn]Y`Yb`"8]Y`H]Yfk Y`h`]gh`b]W`h`k Yb][Yf
VYa Yf`Ybgk Yfh`GY`hYbY`J`Ö[Y`k]Y`XYf`GØX]bgY`hU`U`Y`cXYf`XYf
?U`Udcž`Y]b`Zi [i bZ`Å\][Yf`DUdU[Y]ž`Z]bXYb`\"Yf`Ni Zi W`hž`YVYbgc
k]Y`8]W`gW`bUVY`d]b[i]bYž`X]Y`Ub`XYb`?ØghYb`b]ghYb`"8Yf
BUh]cbU`dUf`žj Yfk U`hYhj ca`8YdUfha Ybh`cZ`7cbgYfj Uh]cbž`gYhnh
U`Yg`XUfUbž`X]YgY`Ya dZ]bX`]WXYb`^`_cgmghYa Y`ni`gW`ØhYbž`i bhYf
UbXYfYa`Xi fW`]bhYbg]j Y`A U» bU`a Yb`[Y[Yb`Y]b[YgW`YddhY
5fhYb`k]Y`F UhYb`cXYf`K Ud]h]g"

: Øf`6Ygi WXYf`ÖZzbYh`g]W`X]Y`FY[]cb`j cf`U`Ya`ØVYf`X]Y`A]ZcfX
Gci bX`FcU`Xž`Y]bY`%&\$`?]`ca`YhYf`Ub[Y`GhfY`W`Y`j cb`HY`5bUi`Ui`gž
X]Y`Xi fW`XYb`<ca`Yf`Hi bbY`ZØ`fh`i`Y]b`VYY]bXfi`W`YbXYg
6Ui`k Yf`ž`XUg`g]W`Xi fW`a Ugg]j Yb`i`Y`g`Vc`fh`"8]Y`<Ui`dhgU]gcb
j cb`C`_hcVYf`V]g`5df]`c`W`h`K UbXYfYfž`5b[`Yf`i bX`HUi`WXYf`Ubž
X]Y`Ui ZXYb`*(,`?)`ca`YhYfb`K UbXYfk Y[Ybž`XUfi bhYf`X]Y
VYfØ`a hYb`i`fYUh`K U`_g`k]Y`XYf`A]ZcfX`HfUW`cXYf`XYf
Fci hYVi fb`HfUW`ž`X]Y`K]`Xb]g`Yf`_i bXYb`"8cW`gY`Vgh`UVgY]hg`XYf
Ui`g[YhfYhYbYb`DZUXYž`]b`XYf`fUi Yb`9]bgUa`_Y]h`XYf`i`c`fXYž`k UfhYh
Y]bY`A U[]Yž`X]Y`g]W`bi`f`Xi fW`XUg`Y][YbY`9f`YVYb`YfgW`i]Y»h"

8]Y`i`c`fXY`XYg`i`]cfX`UbX!BUh]cbU`dUf`_g`g]bX`a Y`f`U`g`bi`f`Y]bY
?i`]ggY`i`g]Y`g]bX`Y]b`i`YbghYf`]b`Y]bY`NY]hž`U`g`X]Y`9fXY`bcW`i`f`b[
k Uf`i`»XY`6cchgZU`fhž`YXYf`6`]W`_`Ui`Z`X]Y`ghY]`Yb`?`]ddYb`cXYf`X]Y
h]YZb`i`Yk`ÅggYf`XYg`@U`_`Y`A UbUdc`i`f`i`bX`@U`_`Y`<Ui`fc`_`cž`X]Y`ni
XYb`h]YZghYb`GYYb`BYi`gYY`UbXg`n`Å`Ybž`Yfn`Å`h`j`cb`XYf
i`bYfa`ØX`]WXYb`?fUZh`XYf`BUhi`fž`X]Y`\"Yf`k Y]hYf`\"]b`k]f`_`h"

J i ` _Ub]gWXY`@UbXgWXY UZhYb



I bhYf'XYf'CVYfZÅWY'BYi gYY'UbXg'VfcXY'h'Y]bY'i bVÅbX][Y
9bYf[]Yž'X]Y'g]WÅ']b'n]gWÅYbXYb'; Ymg]fYbž'XUa dZYbXYb'E i Y''Yb
i bX'gWÅfcZYZ'J i ` _Ub_Y[Y'b'cZYZbVUfh'<]Yfž']b'Y]bYa '@UbXž'XUg
Ui ZXYa ': Yi Yff]b['XYg'DUn]Z]_g'fi \hž'di `g]Yfh'X]Y'9fXY'a]h'Y]bYf
?fUZhž'X]Y'6Ygi WÅYf']b']\fYb'6Ubb'n]Y\h''8]Y' [Ych\Yfa U'Yb
K i bXYf'i bX'U_h]j Yb'J i ` _UbYž'X]Y'g]WÅ'ØVYf'X]Y' BcfX]bgY`
YfghfYW_Ybž'V]YhYb'b]WÅ'h'bi f'gdY_hU_i `ÅfY'5bV`]W_Yž'gcbXYfb
Ui WÅ'Y]bYb'X]fY_hYb'6`]W_]b'XUg'ZYi f][Y'<Yfn'i bgYfYg'D`UbYhYb"
Jcb'XYb'VfcXY'bXYb'@UbXgWÅUZhYb'Fchcfi Ug'V]g'ni `XYb
a UYghÅh]gWÅYb';]dZY'b'XYg'Hcb[Uf]fc!BUh]cbU'dUf_g' `X]YgY
FY[]cbYb'g]bX'Y]b'YVYbX][Yg'NYi [b]g'XYf'j i ` _Ub]gWÅYb
JYf[Ub[Yb\Y]h'i bX'; Y[Ybk Ufh'XYg'@UbXYg"

⊕'Fchcfi Už'a '<YfnYb'XYf' BcfX]bgY'ž'gWÅY]bh'XYf'6cXYb'gY'Vghni
Uha Yb''8Yf'i bj Yf_YbbVUfY'GWÅk YZY` [Yfi WÅ'']Y[h']b'XYf'@ Zhž
k Å\fybX'8Ua dZUi g'GdU'hYb'Ui ZghY][h'i bX'\Y]» Y'E i Y''Yb']b
gi ffYU'Yb': UfVYb'gWÅ]a a Yfb''8]YgY'; Y[YbXž'gY]h'ZUgh'ink Y]
⋈\f\i bXYfhYb'Y]b'5bn]Y\i b[gdi b_h'ZØf'FY]gYbXYž'ZUgn]b]Yfh'a]h
[Ych\Yfa U'Yb'DUf_g'k]Y'K U]!C!HUdi ž'k c'XYf'VYfØ\ a hY
7\Ua dU[bY'Dcc`a]h'gY]bYb'gWÅ]'YfbXYb'FÅbXYfb'6Ygi WÅYf']b
GhUi bYb'j YfgYhnh''; Ymg]fY'k]Y'XYf'Dc\i hi `ja `K \U_UfYk UfYk U
H\Yfa U'J U''Ym'gWÅ]Y» Yb']b'fY[Y'a Å»][Yb'5VghÅbXYb'_cWÅYbXYg
K UggYf']b'X]Y'<Ø\Y'i bX'Yf]bbYfb'Ub'X]Y'fc\Y'9bYf[]Yž'X]Y'i bhYf
XYf'9fX_fi ghY''Ui Yfh''BYVYb'XYf'BUhi f[Yk U'h'V]YhYh'Fchcfi U'Ui WÅ
9f\c'i b['Yfgh_Ugg][Y'GdU!i bX'K Y''bYgg!9]bf]WÅhi b[Yb'bi hnYb
X]Y'\Y]» Yb'E i Y''Yb'ZØf'h\YfUdYi h]gWÅY'6ÅXYfž'X]Y'? ØfdYf'i bX
; Y]gh'VYfi \][Yb''K Yf'a Y\f'ØVYf'X]Y'j]Y'ZÅ'h][Yb'9f'YVb]ggY']b

NcbYb`XYg`DUf_gžk jY`XjY`?YhYhU\`<ch`Gdf]b[gžj YfghÀf_Yb`XYb
9]bXfi W_ž`Ui ZY]bYa ``YVYbXYb`Cf[Ub]ga i g`ni`k UbXYfbž`XYggYb
≠bYfYg`i bYfa ØX`]W\`UfVY]hYh`6Ygi W\Yf`gdØfYb`\]Yf`XjY`fc\Y
?fUZh`XYf`9fXY`i bhYf`]fYb`: Ø» Ybž`k À\fybX`g]Y`Xi fW`Y]bY
@UbXgW\UZh`n]Y\Ybž`X]Y`k jY`Ui g`Y]bYf`UbXYfYb`NY]h`gW\Y]b`h`

8]Y`j`i`_Ub]gW\Yb`i bX`[Ych\Yfa U`Yb`; YV]YhY`BYi gYY`UbXg`g]bX
b]W\h`bi f`[Yc`c`[]gW\Y`K i bXYfž`gcbXYfb`Ui W\`CfhYž`X]Y`XjY
J YfV]bXi b[`nk]gW\Yb`A YbgW\`i bX`BUhi f`Ui ZY]bY`Y]bn][Ufh][Y
K Y]gY`j`YfXYi h]W\Yb`"≠`Fchcfi U`YfnÀ\`Yb`X]Y`\Y]» Yb`E i Y`Yb`i bX
; Ymg]fY`j`cb`XYf`ghÀbX][Yb`9fbYi Yfi b[`XYf`9fXYž`k À\fybX`XjY
J i`_UbY`XYg`Hcb[Uf]fc!BUh]cbU`dUf_g`Ub`X]Y`nYfghØfYf]gW\Yž`UVYf
Ui W\`gW\`ÖdZYf]gW\Y`A UW\h`XYf`BUhi f`Yf]bbYfb`"≠`XYf
8Ua`dZgW\`Y]Yfž`YXYf`?fUHYffUbX`ÀXh`XUni`Y]bž`X]Y`8mbUa`]_
i bgYfYg`D`UbYhYb`\Ui hbU\`ni`Yf`YVYb`i bX`g]W\`j`cb`gY]bYf
i b[YVÀbX][hYb`9bYf[]Y`]bgd]f]YfYb`ni`"UggYb`"

8]Y`a`U`YghÀh]gW\Yb`5`dYb`



K c`XYf`<]a`a`Y`X]Y`9fXY`ni`VYfØ\fyb`gW\Y]bž`Yf\YVYb`g]W\`X]Y

Gci h\Yfb'5`dg'k]Y`Y]bY`a U`YghÅh]gW\Y`6Uff]YfYž`X]Y`XUg`F`ØW_[fUH
XYf`GØX]bgY`B`Yi gYY`UbXg`V]`XYh" , VYf`) \$\$`?`]`ca`YhYf`YfghfYW`h
g]W\`X]YgY` ; YV]f[g`_YhY`]b`Y]bYa` `gUbZhYb`6c[Yb`j`cb`B`cfXcghYb
bUW\`GØXk`YghYbž`Y]b`A`cbi`a`Ybh`Ui`g` :`Y`g`i`bX`9]gž`XUg`X]Y
@UbXgW\UZh]b`nk`Y]`K`Y`hYb`hY]`h` `X]Y`ZYi`W`hYž`k`]`XY`K`Ygh`ØghY
i`bX`X]Y`hfcW`_YbYfYž`VYj` Ò`_Yfi`b[gfY]W\YfY`C`ghgY]hY`" `A`]h` ;]dZY`bž
X]Y`]b`gW\`k`]bXY`YffY[YbXY`<`Ò\`Yb`fU[Ybž`i`bX`HÅ`Yfbž`X]Y`j`cb
i`fU`hYb` ; `YhgW\Yfb`[YZcfa`h`k`i`fXYbž`V]YhYb`X]YgY`6Yf[Y`Y]bY
?`i`]ggYž`X]Y`gck`c`\`9`fZ`fW`h`U`g`Ui`W`5`VYbhYi`Yf`i`gh`k`YW`h`<`]Yfž
]ba`]hYb`j`cb`gW\`bYYVYXYW`_hYb`Gd]hnYb`i`bX`h]YZYb
 ; `YhgW\YfgYYbž`Z]bXYh`g]W\`Y]bY`GW\`Òb`Y]hž`X]Y`XYb`Di`g`XYf`NY]h
gY`Vgh`ni`]`Yf`Ub[gUa`Yb`gW\Y]b`h`

⇒ `NYbhfi`a` `X]YgYf`U`d]bYb`DfUW`h`h`fcb`h`5cfU`_]`#`ci`bh`7`cc`_ž`a`]h
" `"+&(`A`YhYfb`XYf` \`ÒW`ghY` ;]dZY` `XYg`@UbXYg" :`Øf`X]Y`A`Ýcf]`hfÅ[h
X]YgYf`6Yf[`XYb`B`Ua`Yb`5cfU`_]ž`VYb`Ubb`h`b`UW\`Y]bYa` `a`mh\]gW\Yb
5`b`Ybž`XYggYb`gd]f]hi`Y`Y`6`YXYi`hi`b[`h]YZ]b`XYf`?`i`hi`f`j`Yfk`i`fnY`h
]gh`GY]bY`gW\`fc`ZYb` :`Ub`_Ybž`c`Zh]`cb`K`c`_Yb`i`a` \`Ø`hž`fU[Yb`k`]Y
Y]b`K`ÅW`hYf`ØVYf`XYb`[`Y]W\`b`Ua`] [Yb`B`Uh]cb`U`d`Uf`_ž`XYf`HY]`XYg
I`B`9`G`7`C`!`K`Y`hb`U`hi`fYfVYg`]gh`" `K`Ub`XYfYf`i`bX`6`Yf[ghY][Yfž`X]Y`g]W\`
Ub`XYb`5`i`Zgh]Y[`k`U[Yb`c`XYf`X]Y`i`a` `Y] [YbXYb`DZUXY`Yf`_i`bXYbž
k`YfXYb`a`]h`DUbcfUa`Yb`VY`c`b`hž`X]Y`XYb`5`hYa` `ghcW`_Yb` `UggYb`"
 :`Øf`X]Y`Yb][Ybž`X]Y`g]W\`Ui`ZY]bY`[YZØ`fhY`Hci`f`VY[YVYb
a`ÒW`hYbž`V]YhYh`X]Y`F`Y[]cb`n`U`f`Y]W\`Y`A`Ò[`]W\`_Y]hYbž`k`]Y`a`Ub
VY]`5`dg`A`ci`bhU]bYYf]b[`bUW\`YgYb`_Ubb` `j`cb`hYW\`b]gW\Yb
?`YhYf`_i`fgYb`V]g`\]b`ni` `a`Y`fhÅ[] [Yb`9I`dYX]h]cbYb`ØVYf`DÅggY
k`]Y`XYb`6`U` `DUgg`"

8]Y`Gci`h\Yfb`5`dgž`cXYf`?`Ý`H]f]h]f]`c`hY`A`c`Ub`U`]b`XYf`GdfUW\Y`XYf`
A`Ýcf]ž`g]bX`b]W\`h`bi`f`Y]b`DUfUX]Yg`ZØf`5`VYbhYi`fYfž`gcb`XYfb`Ui`W\`
Y]b`[Yc`c[]gW\Yg`K`i`bXYf`"9`bhgh`Ub`XYb`j`cf`ØVYf`(`) `A`]`cb`Yb
`X\`fYb`Xi`fW\`X]Y`?`c`]g]cb`hY`_`hcb]gW\Yf`D`U`h`h`Yb`Yb`h`Ub[`XYg
DU`n]Z]gW\Yb` :`Yi`Yff]b[gž`k`UW\`gYb`X]YgY`6`Yf[Y`bc`W\` \`Yi`hY`i`a
Yhk`U`g]YVYb`A`]`ja`YhYf`dfc` `X\`f` `Y]bY`gh]`Yž`XcW\`i`b`Ui`Z`U`hgUa`Y
6`Yk`Y[i`b[`XYf`9`fXY" , VYf`" "\$\$\$` ; `YhgW\Yfž`XUfi`bhYf`XYf`HUga`Ub
 ; `UW]Yf`a`]h`Y]bYf`@Åb[Y`j`cb`&`ž`?`]`ca`YhYfbž`dfÅ[Yb`X]Y
@UbXgW\UZh`i`bX`gdY]gYb`GY`Yb`k`]Y`XYb`@U`_Y`7`c`Yf]X[Y`c`XYf`XYb
@U`_Y`K`U`_Uh]di` `a`]h`_f]ghU` `U`fYa` `GW\`a`Y`nk`UggYf`"8`]YgY`Y]g][Yb

F Y`_hY`XYf`J Yf[Ub[Yb\Y]h`_cbhfUgh]YfYb`a]h`XYb`[fØbYb`HÀ`Yfb
i bX`fUi Yb` : Y`gk ÀbXYbž`X]Y`VY]`YXYa`K`YhhYf`Y]bY`UbXYfY
Gh]a`a`i`b[`j`YfghfØa`Yb`"

8 Ug`?`a`U`]b`X]YgYf`F Y[]cb`nY][`h`g]Wk`gc`k`YWk`gY`\`UZh`k`J`Y`X]Y
@UbXgWk`UZh`gY`Vgh`K`À`fYbX`X]Y`K`Ygh`ØghY`V]g`ni`%)`"\$\$\$
A`j`a`YhYf`B]YXYfgWk`U[`dfc`đ`f`b`U`Y`XYf`<`Ui`dhk`UggYfgWk`Y]XY
Yf\`À`hž`g]b`_h`X]Y`A`Yb[`Y`bi`f`\$`?`]`ca`YhYf`Øgh`]Wk`Ui`Z`Yhk`U`%"`\$\$\$
A`j`a`YhYf`"8]YgY`i`bhYfgWk]YXY`Zcfa`Yb`Y]bY`J]Y`ZU`h`Ub
²`_cgmghYa`Ybž`X]Y`Yhk`U`Y]b`J]YfhY`XYf`DZ`UbnYb`UfhYb
BYi`gYY`UbXg`VY\`YfVYf[`Ybž`j]Y`Y`XUj`cb`YbXYa`]gWk`i`bX`c`VYf\`U`V
XYf`6`Ui`a`[`fYbnY`ni`Z]bXYb`"8`c`Wk`X]Y`Y]b`Y]a`]gWk`Y`:``cf`U`ghY`\`h
i`bhYf`8`fi`W`_`Xi`f`Wk`Y]b[`Y`ZØ`f`hY`5`fhYb`k`J]Y`F`chk`]X`c`XYf`XYb
<`ja`U`UmU!`HU`f`ž`X]Y`X]Y`Ya`d`Z]bX`]Wk`Y`J`Y[`YhU]cb`VYXfc`\`Yb`"
GWk`i`hn[`YV]YhY`k`J]Y`XYf`5`cfU`_]#`A`ci`bh`7`cc`_`B`Uh]cb`U`DUf`_ž`XYf
K`Ygh`UbX`HU]`Dci`h]b]`B`Uh]cb`U`DUf`_`i`bX`XYf`A`ci`bh`5`gd]f]b[
B`Uh]cb`U`DUf`_`gY`hmYb`g]Wk`ZØf`XYb`9`f\`U`h`X]YgYf`Y]bn][`Ufh][`Yb
l`a`k`Y`hY]b`"

:`Øf`F`Y]gYbXY`Ø`ZbYb`g]Wk`X]Y`Gci`h\`Yfb`5`dg`Ø`VYf`k`]Wk`h][`Y`D`À`ggY
k`J]Y`XYb`5`fh\`i`f`g`DUgg`c`XYf`XYb`<`UUgh`DUggž`X]Y`gdY`_`hU`_`i`À`fY
5i`gV`]W`_`Y`i`bX`Ni`[`Ub[`ni`UV[`Y`Y[`YbYb`HÀ`Yfb`V]YhYb`"8]YgY
F`ci`hYbž`c`Z`h`j`cb`gWk`a`U`Yb`GhfU»`Yb`Xi`f`Wk`nc[`Ybž`ZØ`f`Yb`Xi`f`Wk
Y]bY`K`Y`hž`]b`XYf`X]Y`B`Uhi`f`X]Y`C`VYf\`UbX`VY\`À`h`K`UbXYfk`Y[`Y
gWk`À`b[`Y`b`g]Wk`Yb`h`Ub[`ghY]`Yf`<`À`b[`Y`ž`k`À`f`YbX`C`fhY`k`J]Y
C`a`Uf`Ua`U`ZØf`]\`fY`\`Yfj`c`ffU[`YbXYb` ;`Y]hVYX]b[`i`b[`Yb`VY`_`Ubb`h
g]bX`_`Y]b`DUfUX]Yg`ZØf`GY[`Y`Z]Y[`Yfž`X]Y`Ø`VYf`XYb` ;`]d`ZY`b
gWk`k`YVYb`"8]Y`U`d]bY`H]Yfk`Y`hž`X`Ufi`bhYf`YbXYa`]gWk`Y`5`fhYb`k`J]Y
XYf`:``Y`gYb`k`fYb`c`XYf`gY`hYbY`đ`gY`_`hYbž`ZØ[`h`XYf`F`Y[]cb`Y]bY
k`Y]hYfY`9`VYbY`XYf`:``Ugn]b`Uh]cb`\]bni`ž`X]Y`VY]`Y`XYa`G`Wk`f]h`h
Yb`hXYW`_`h`k`YfXYb`_`Ubb`"

8]Y`Gci`h\`Yfb`5`dg`g]bX`Y]b`C`fhž`Ub`XYa`X]Y` ;`fYbnYb`nk`]gWk`Yb
<`ja`a`Y`i`bX`9`fXY`j`YfgWk`k`ja`a`Ybž`k`c`Y`XYf` ;`]d`ZY`Y]bY
 ;`YgWk]Wk`hY`j`cb`A`j`cbYb`đ`f`Yb`Yfn`À`h`C`V`a`Ub`X]Y
gWk`b`Y`Y`VY`X`Y`W`_`hYb`<`Ø`Yb`j`cb`5`cfU`_]#`A`ci`bh`7`cc`_`Yf`_]a`a`h`c`XYf
Y]b`ZUWk`bi`f`X]Y`Gh]`Y`Y]bYg` ;`YhgWk`YfhU`g`[`Yb]Y»`hž`X]YgY`6`Yf[`Y
V]YhYb`Y]bY`:``i`Wk`h`Ui`g`XYf`<`Y`_`h]`_`XYf`K`Y`h`i`bX`UXYb`X`Uni`Y]bž`

X]Y'i bVYfØ\fhY`K]`Xb]g'a]h'U`Yb`G]bbYb`ni `Yf`YVYb"

K UggYfZÄ`Y`i bX`GYyb



9]b`Y]gYg`F Ui gWYbž`XUg`ni `Y]bYa `c\fybVYhAi VYbXYb`HcgYb
UbgWk]`hzi bX`Y]b`GW]a a Yfbž`XUg`k]Y`Y]b`Gd]Y[Y`X]Y
i a `Y[YbXYb`6Yf[Y`Y]bZAb[h`i`BYi gYY`UbXg`K UggYfZÄ`Y`i bX
GYyb`g]bX`Y]bY`Gma d\cb]Y`Ui g`6Yk Y[i b[`i bX`Gh]`Yž`X]Y`XUg
<Yfn`XYg`@UbXYg`Xi fWn]Y\h`A]h`ØVYf`%)` \$\$`K UggYfZÄ`Y`bž
[YgdY]gh]j cb`Y]bYa `BYhn`Ui g`(&\$"\$\$\$`?)`ca YhYfb`:`ØggYb`i bX
6ÄWYb`gck]Y`ZUgh, \$\$`GYybž`dfÄgYbh]Yfh'g]W`X]YgYg`@UbX`U`g`Y]b
k U\fyg`K UggYfdUfUX]Yg`J cb`hcgYbXYb`? Ug_UXYbž`X]Y`g]W`Xi fW
Yb[Y`GW`i W`hYb`nk Äb[Ybž`V]g`\]b`ni `[`Ug_`UfYb`; Yk ÄggYfbž`X]Y
]b`høf_]gZUfVYbYa `; `Ubn`YfghfU\`Ybž`V]YhYb`X]YgY
BUhi fd\Äbca YbY`Y]bYb`? cbhfUghž`XYf`X]Y`J]Y`ZU`h`XYf` ðgY`b
k]XYfgd]Y[Y`h`>XYf`HfcdZYb`YfnÄ\`h`\]Yf`j cb`XYf`i bYfa ØX`]WYb
?fUZh`XYf`9fXYž`X]Y`@UbXgW`UZhYb`Zcfa h`i bX`@YVYb`gdYbXYh"

6Y[]bbYb`k]f'a]h`XYb`<i _U`:`U`gž`Y]bYa `VYY]bXfi W_YbXYb
GWUi gd]Y`bU\Y`HUi dc`Ui Z`XYf`B`cfX]bgY`"<]Yf`ghØfnYb`dfc

GY_i bXY`V]g`ni `&&\$"\$\$\$`@]hYf`K UggYf`XYg`K U]_Uhc`F]j Yf`Xi fWk
Y]bY`Yb[Yž`bi f`%) `A YhYf`VfY]hY`GWk`i Wk`hž`VYj cf`g]Y`g]Wk`]b`Y]bYa
hcgYbXYb`?UhUfU`h`ØVYf`Y]bY`Y`ZA YhYf`c`c`Y`?UbhY`Yf[]Y»Yb`8 Ug
K UggYf`gWk`Ai a`h`]b`Y]bYa``Yi Wk`hYbXYb`HØf_]gž`k`À`fYbX`XYf
BYVY`]b`XYf`@] Zh`hUb`nh`i bX`X]Y`i a`]Y[YbXYb`: Y`gYb`VYbY`hnh`J`cb
5i`gg]Wk`hgd`UhhZcfa`Yb`Ui`g`cXYf`VY]`Y]bYf`6cc`hghci`fž`X]Y`V]g`X]Wk`h
Ub`X]Y`: À`Y`Y`fUbZØ`f`hž`À`ggh`g]Wk`X]Y`i bV`ÀbX][Y`9bYf[]Y
`Ui`hbU`Y`f`YVYb`8]Y`<`i`_U`: U`g`g]bX`b]Wk`h`bi`f`Y]b`j`]gi`Y`Y`g
GdY`_hU`_Y`ž`gcbXYfb`Ui`Wk`Y]b`6Y]gd]Y`ZØf`X]Y`k`]fhgWk`UZh`]Wk`Y
6YXY`i`hi`b[`gc`Wk`Yf`BU`hi`fk`i`bXYf`g]Y`n]Y`Yb`À`f`]Wk`HUi`gYbXY
j`cb`6Ygi`Wk`Yfb`Ub`i`bX`hfU[Yb`ni`f`9bYf[]Y[Yk`]bbi`b[`]b`XYf
FY[]cb`VY]"

K`Y]hYf`gØX`]Wk`ž`]a`A`UW`_Ybn]Y`7ci`bhfm`XYf`GØX]bgY`ž`YfghfY`W`h
g]Wk`XYf`@U`_Y`HY`_Udc`k`]Y`Y]b`š`k`Y`]ba`]hhYb`fUi`Yf
6Yf[`UbXgWk`UZhYb`8GY]b`K`UggYf`Yi`Wk`hYh`]b`Y]bYa`i`bk`]f`_]Wk`Yb
HØf_]gž`Y]bY`: UfVYž`X]Y`Xi`fWk`ZY]bghY`;`YhgWk`YfdUfh]_Y`Yb`hghY`hž
X]Y`XUg`@]Wk`h`VfY`Wk`Yb`I`a`[YVYb`j`cb`XYb`gWk`bYVYXYW`hYb
;`]dZY`b`XYf`Gci`h`Yfb`5`dgž`V]YhYh`XYf`GYY`Y]bY`?`i`]ggYž`X]Y
VYgcbXYfg`VY]`_`UfYa`<`]a`a`Y`UhYa`VYfUi`VYbX`]ghž`k`Ybb`g]Wk`X]Y
6Yf[Y`Ui`ZXYf`gh`]Yb`C`VYfZ`ÀWk`Y`gd]Y[Y`b`8Yf`@U`_Y`HY`_Udc`gd]Y`h
ni`XYa`Y]bY`k`]Wk`h[Y`F`c`Y`ZØf`X]Y`K`UggYf`fUZh`XYg`@UbXYgž`XcWk
ZØf`6Ygi`Wk`Yf`]gh`Yf`j`cf`U`Y`a`Y]b`C`fh`XYf`Fi`Y`GdUn]Yf[`Àb[Y
Yb`hUb[`XYg`I`ZYfg`cXYf`Y]b`6`]W`_Ui`Z`X]Y`bU`Y[Y`Y[YbY`7`i`fWk`cZ
h`Y`;`ccX`G`Yd`YfXž`Y]b`_cb]gWk`Yg`: chca`ch]j`ž`UXYb`XUni`Y]bž
X]Y`A`U[]Y`X]YgYg`C`fhYg`ni`[Yb]Y»Yb"

B`Yi`gYY`UbXg`K`UggYfZ`À`Y`nY][Yb`g]Wk`]b`Y]bYf`YfghUi`b`]Wk`Yb
J]Y`ZU`hž`j`cb`gUbZhYb`?Ug`_UXYb`V]g`Y]b`ni`a`ÀWk`h[Yb`GhØfnYb`8]Y
Gh]f`]b[`: U`g`]a`A`]Zc`fX`Gci`bXž`X]Y`g]Wk`ØVYf`%) `A`YhYf`]b`X]Y
H]YZ`k`YfZYbž`g]bX`VYgcbXYfg`bUWk`F`Y[YbZ`À`Yb`Y]b
VYY]bXfi`W`_YbXYf`5bV`]W`_ž`k`Ybb`g]Y`k`]Y`Y]b`g]VYfbYf`J`cf`Ub[`X]Y
: Y`gk`ÀbXY`Y]bUV[`Y]hYb`9VYb`gc`ZUgn]b]YfYbX`g]bX`X]Y`A`W`@Y`Ub
: U`g`]b`XYb`7`Uh`]bg`Ui`Z`XYf`GØX]bgY`ž`X]Y`]b`a`Y`fYfYb`Ghi`ZYb
Xi`fWk`Ødd][Yb`F`Y[Ybk`U`X`Z]Y»Yb`i`bX`Y]bY`a`mgh]gWk`Y
5ha`cgd`ÀfY`j`Yfghf`Òa`Yb`K`Yf`g]Wk`Ui`Z`X]Y`Gi`Wk`Y`bUWk`X]YgYb
BU`hi`fgWk`Øb`Y]hYb`VY[]Vhž`gc`hY`X]Y`H]ddg`ni`f`: chc[fUZ]Y
VY`Yfn][Yb`Y]b`GhUh]j`i`bX`:]`hYf`_ØbbYb`Y`ZYbž`X]Y`6Yk`Y[i`b[

XYg'K UggYfg']b'U''']\fYf'DfUWKh'ZYghni \U'hYbž'k]Y'a Ub'VY]'
K Y`hk i bXYfYf'bUWk'YgYb'_Ubb""8cWk'Jc'fg]WKh']gh'[YVchYb.
I bØVYf'Y[hY'GdfØb[Y']b': Y'gYbVYW_Yb'_ØbbYb'[YZÀ\ f']Wk'gY]bž
k]Y'hfU[]gWk'Y'I bZÀ`Y']b'XYf'J Yf[Ub[Yb\Y]h'nY][Yb"

8]Y'GYyb'XYg'@UbXYg'V]YhYb'Y]bYb'; Y[Ybdc`'ni f'k]'XYb'9bYf[]Y
XYf'K UggYfZÀ`Y""BYVYb'XYa' '@U_Y'HY_Udc'VYY]bXfi W_h'Ui Wk'XYf
@U_Y'A Uh\Ygcb'Ub'XYf'K Ygh_ØghYž'VY_Ubbh'ZØf'gY]bY'dYfZY_hYb
Gd]Y[Y'i b[Yb'XYf'i a']Y[YbXYb'; `YhgWk'Yf'i bX'6Yf[Yž
]bgVYgcbXYfY'VY]'k]bXgh]'`Yb'A cf[Ybghi bXYb""8]YgY'; Yk ÀggYf
g]bX'cZ'hj'cb'; `YhgWk'Yfb'[YgdY]ghž'k Ug']\bYb']\fY
Ui »Yf[Yk Ø\ b']Wk'Y?'`Uf\Y]h'i bX': UfVY'j Yf'Y]\h"G]Y'gWk'UZZYb'b]Wk'h
bi f'a U'Yf]gWk'Y'5i gV']W_Yž'gcbXYfb'Ui Wk'Y]b'ZYi Wk'hYg'A]_fc_]a Už
XUg'X]Y'5fhYbj]Y'ZU'h]b']\fYf'I a [YVi b['ZØfXYfh']j'cb'gY'hYbYb
K UggYfj Ø[Y'b'V]g'\]b'ni 'Ødd][Yf'J Y[YhUh]cb'Ybh'Ub['XYf'I ZYf"

8]Y'K UggYfZÀ`Y'i bX'GYyb'BYi gYY'UbXg'g]bX'a Y'\f'U'g'bi f
'UbXgWk'UZh]Wk'Y'<][\'][\ hg']g]Y'g]bX'c'fhYž'Ub'XYbYb'X]Y'fc\Y
'fUZh'XYf'B Uhi f'i bX'X]Y'gUbZhY'F'i \Y'XYf'9fXY'Ui ZY]bUbXYfhfYZZYb"
C V'a Ub'XUg'HcgYb'XYf'<i _U': U`g'gdØfh'cXYf']b'X]Y'hØf_]gZUfVYbY
H]YZY'XYg'@U_Y'HY_Udc'V']W_hž'X]YgY'K UggYfk Y'hYb'`UXYb'XUni
Y]bž']bbYni \U'hYb'i bX'X]Y'i bYbX']Wk'Y'J]Y'ZU'h'XYf'B Uhi f'ni
VYghUi bYb"

8]Y'j]Y'ZÀ`h][Y'H]Yfk Y'h



H]YZ]b`XYb`K A`XYfb`i bX`Ui ZXYb`UV[Y`Y[YbYb`ϕgY`b
BYi gYY`UbXg`j YfV]f[h`g]W`Y]b`GW`Uhnž`XYf`gc`Y]bn][Ufh][`]ghž`XUgg
Yf`b]f[YbXk`c`gcbgh`Ui Z`XYf`K Y`h`ni`Z]bXYb`]gh`Y]bY`K Y`h`j`c`Yf`
?fYUhi`fYb`i bX`DZUbnybž`X]Y`g]W`ØVYf`A`]`cbYb`ϕ\`fY`]b`j`Ö`][Yf`
ϕc`Uh]cb`Yb`hk`]W`Y`h`\`UVYb`"8i`fW`X]Y`5V[YgW`]YXYb`\Y]h`]a
GØXdUn]Z]_`_`cbbhY`g]W``\`Yf`Y]bY`6]cX]j`Yfg]h`h`YbhZU`hYbž`X]Y`]b
]\`fYf`9i`_`i`g]j`]h`h`ZUgn]b]Yfh`",`VYf`,`\$`DfcnYbh`XYf`DZUbnyb`i`bX`
Y]bY`J]Y`nU`\`Ub`H]YfYb`g]bX`YbXYa`]gW`ž`k`Ug`VYXYi`hYhž`XUgg`g]Y
Ui`ggW`]Y`»`]W`]b`X]YgYa`@UbX`j`cf`_`ca`a`Yb`"8]YgY
Ui`»`Yf[Yk`Ö`\`b`]W`Y`5fhYbj`]Y`ZU`h`Yfn`h`h`Y]bY`;`YgW`]W`hY`j`cb
5bdUggi`b[`i`bX`,`VYf`YVYbž`X]Y`6Ygi`W`Yf`]b`Y]bY`"Ab[gh
j`Yf[YggYbY`NY]h]j`YfgYhnhž`]b`XYf`X]Y`BUhi`f`]\`fY`Y][YbYb`FY[Y`b`
gW`f]YV"

9]b`Gma`Vc`X]YgYf`9]bn][Ufh][_Y]h`]gh`XYf`?`]k`]ž`Y]b`Zi`[`i`bZ`\][Yf`
Jc[Y`ž`XYf`ni`a`bU]cbU`Yb`K`U\`fnY]W`Yb`BYi`gYY`UbXg`[Yk`cfXYb`
]gh`A`]h`gY]bYa`Ub[Ybž`[YVc[YbYb`GW`bUVY`ž`XYb`Yf`bi`hnhž`i`a`
]a`6cXYb`bUW`ϕgY`_`hYb`ni`gi`W`Ybž`i`bX`gY]bYa`X]W`hYbž`
\`UUf`h`\`b`]W`Yb`;`YZ]YXYf`k`]f`_`h`XYf`?`]k`]k`]Y`Y]b`FY`]_`h`Ui`g`Y]bYf`
UbXYfYb`Ÿ`fU`"B`UW`hU`_`h]j`i`bX`gW`Yi`ž`YVh`Yf`]b`X]W`hYb`K`A`XYfb`
i`bX`]gh`ZØf`j`]Y`Y`6Ygi`W`Yf`gW`k`Yf`ni`Yfgd`h`\`Yb`"8`cW`]b`
GW`i`hn[YV]YhYb`k`]Y`XYa`NYU`UbX]U`9W`gUbW`hi`Ufmi]b`K`Y`]b[hc`b`
cXYf`Ui`Z`GhYk`Ufh`ϕ`UbX`"UggYb`g]W`a`]h`Yhk`Ug`;`YXi`X`X]YgY`

ZUgn]b]YfYbXYb`J`O[Y`VYcVUW`hYb"8Yf?`jk`]ghY\hYI Ya`d`Uf]gW`
Z0f`X]Y`j`]Y`Yb`YbXYa`]gW`Yb`5fhYbž`X]Y`Xi`fW`X]Y`g`c`Uh]cb`XYf`
gY`b`Y]bY`Y]bn][`Ufh][`Y`9j`c`i`h]cb`Xi`fW`Ui`ZYb`\UVYb"

B`YVYb`XYa`?`jk`]VYj`O`_Yfb`k`Y]hYfY`Ui`»`Yf[`Yk`O\b`]W`Y`;`YgW`O`d`ZY`
X]YgY`@UbXgW`UZhYb"8Yf?`U`Udcž`Y]b`Zi`[`i`bZ\][`Yf`DUdU[`Y]ž`]gh`
Y]bYf`XYf`gY`hYbghYb`J`O[Y`XYf`K`Y`hi`bX`YVh`bi`f`]b`[`YgW`O`hnhYb`
;`YV]YhYb`k`]Y`XYa`:`]cfX`UbX!`BUh]cbU`dUf`_"`A`]h`gY]bYa`
a`ccg[`f0bYb`;`YZ]YXYf`i`bX`gY]bYa`[`Ya`ÅW`]W`Yb`K`YgYb`gW`Y]bh`
Yf`ZUgh`i`bk`]f`_]W`ž`XcW`gY]bY`9I`]ghYbn`]gh`VYXfc`\h`]bj`Ug]j`Y`
5fhYb`k`]Y`F`UhhYb`\UVYb`gY]bY`Dcdi`Uh]cb`ghUf`_`XYn]a`]Yfh`9VYbgc`
VYa`Yf`_Ybgk`Yfh`]gh`XYf`Hi`UhUfUž`Y]bY`F`Ydh`]YbUfhž`X]Y`U`g`
`YVYbXYg`:`cgg]`[`]hž`XU`g]Y`gY]h`0VYf`&\$`\$`A`]`]cbYb`d\`fYb`
bU\`Yni`i`bj`Yf`ÅbXYfh[`YV`]YVYb`]gh"8]YgY`i`fnY]h]W`Yb`K`YgYbž`X]Y`
k`]Y`_`Y]bY`8]bcgUi`f]Yf`k`]f`_Ybž`Z]bXYb`g]W`j`cf`U`Ya`Ui`Z`_`Y]bYbž`
UV[`Y`Y[`YbYb`gY`b`j`cf`XYf`?`0ghYž`k`c`g]Y`j`cf`F`Ui`Vh]YfYb`g]W`Yf`
g]bX"

8]Y`:`cfU`BYi`gYY`UbXg`]gh`b]W`h`k`Yb][`Yf`VYY]bXfi`W`_YbX"8Yf`
?`Ui`f]!`6Ui`a`ž`Y]bYf`XYf`Å`hYghYb`i`bX`[`f0»`hYb`6`Ai`a`Y`XYf`K`Y`hž`
fU[`h]b`K`Å`XYfb`k`]Y`XYa`K`U]dci`U`:`cfYgh`a`U`Ygh`Åh]gW`]b`XYb`
<]a`a`Y`" `HUbY`A`U\i`hUž`XYf`[`f0»`hY`YVYbXY`?`Ui`f]ž`k`]fX`Ui`ZY]b`
5`hYf`j`cb`V]g`ni`&")`\$\$`d\`fYb`[`YgW`Å`hnh`i`bX`j`Yf`_`0fdYfh`X]Y`
nY]h`c`gY`GW`O`b`Y]h`X]YgYf`YbXYa`]gW`Yb`DZUbnybk`Y`h`9VYbgc`
ZUgn]b]YfYbX`g]bX`X]Y`GW`Y]bVi`W`Ybž`X]Y`]b`XYb`[`Ya`Å`][`hYb`
F`Y[`Ybk`Å`XYfb`Xca`]b]YfYb`i`bX`c`Zhi`a`]h`Y]bYa`X]W`hYb`
A`ccghYdd]W`0VYfnc[`Yb`g]bXž`XYf`XYb`K`Å`XYfb`Y]bY`a`mgh]gW`Y`
5ha`cgd`\`ÁfY`j`Yf`Y`\`h"`,`VYf`+`\$\$`DZUbnybUfhYb`]a`:`]cfX`UbX!`
BUh]cbU`dUf`_`U`Y]b`g]bX`b]f[`YbXk`c`gcbgh`ni`Z]bXYbž`Y]b`6Yk`Y]g`
Z0f`X]Y`Y]bn][`Ufh][`Y`9bhk`]W`_`i`b[`g[`YgW`]W`hY`X]YgYf`gY`b`"

8]Y`g`c`Uh]cbž`X]Y`X]YgY`5fhYbj`]Y`ZU`h`Yfa`O[`]W`hYž`a`UW`h`g]Y`
Y`XcW`Ui`W`VYgcbXYfg`j`Yfk`i`bXVUF"9]b[`YgW`Y`ddhY`5fhYb`k`]Y`
F`UhhYbž`Dcggi`a`g`i`bX`?`UhhYb`VYXfc`\Yb`j`]Y`Y`YbXYa`]gW`Y`H]YfYž`
XU`X]YgY`c`Zi`_Y]bY`bUh0f`]W`Yb`5V`k`Y`fghfUhY[`]Yb`[`Y[`Yb`gc`W`Y`
F`Ai`VYf`Yb`hk`]W`_`Y`h`\UVYb"8Yf`8YdUfha`Yb`h`c`Z`7`cbgYfj`Uh]cb`gY`hnh`
g]W`a`]h]bhYbg]j`Yb`GW`i`hndfc[`fUa`a`Yb`Z0f`XYb`9f`U`h`X]YgYf`
5fhYb`Y]bž`XUfi`bhYf`X]Y`K`]YXYf`YfghY`i`b[`]j`cb`@VYb`g`f`Ai`a`Yb`

i bX'ghfYb[Y'cbhfc`Yb'[Y[Yb']bj Ug]j Y'GdYn]Yg"K Yf'a Y\ f'ØVYf
X]Y'6YXYi hi b['i bX'XYb'GW i hn'YbXYa]gWYf'5fhYb'YfZU\ fYb
a ØW hYž'Z]bXYh'VY]'Ghi XmGa UfhYf'k Yfhj c`Y' ðZcfa Uh]cbYb'ØVYf
X]Y'F c`Y'X]YgYf' C f[Ub]ga Yb']b'XYf' [`cVU'Yb'6]cX]j Yfg]hÅhi bX'X]Y
< YfUi gZc fXYfi b[Ybž'XYbYb'g]Y' [Y[Yb'ØVYfghY\Yb"

9]b'k Y]hYfYg'<][\`][\h'XYf'H]Yfk Y'h]gh'XYf'?YUž'Y]b'bYi []Yf][Yf
6Yf[dUdU[Y]ž'XYf']b'XYb'Gci h\Yfb'5`dg`YVh"6Y_UbbhZØf'gY]bY
ðhY`][Ybn'i bX'gY]bYb'Gd]Y'hf]YVž]gh'Yf'cZh'Ub'K UbXYfk Y[Yb'ni
gY\Ybž'k c'Yf'a]h'gY]bYa' _fÅZh][Yb'GW bUVY`bUW'BU\fi b['gi W h
'cXYf'[Y'Y[Ybh]W'Ub'5i gfØghi b['j cb'K UbXYfYfb'_bUVVYfh"
8]YgY'YbXYa]gWYb'5fhYb'hfU[Yb'b]W h'bi f'ni f'[YbYh]gWYb
J]Y'ZU'h'VY]ž'gcbXYfb'YfZØ`Yb'Ui W'gdYn]Z]gWY': i b_h]cbYb']b
]\fYb'^2 _cgmghYa Ybž'gY]'Yg'Xi fW'6YghÅi Vi b[ž'GUa Ybj YfVfY]hi b[
cXYf'U'g'GW'ØggY'UfhYbž'X]Y'XUg', VYf'YVYb'UbXYfYf'GdYn]Yg
ZØfXYfb"

8]Y'6Y[Y[bi b['a]h'XYf': `cfU'i bX': Ui bU'BYi gYY'UbXg]'gh'k]Y
Y]bY'F Y]gY']b'Y]bY'K Y'hž'X]Y'g]W'j cb'U`Ya'6Y_UbbhYb'UV\YVh"
X'XYf'J c[Y'fi Z'YXYf'i fU'hY'6Ui a'YfnÅ'h'j cb'Y]bYf'9]c'i h]cbž
X]Y']b'j Ø`][Yf'5V[YgW]YXYb\Y]h'\fYb'Y][YbYb'K Y['[]b["'8]YgY
'YVYbX][Yb'GW ÅhnY'UXYb'XUni'Y]bž'X]Y'NYfVfYW'W_Y]h'i bX
GW Øb\Y]h'XYf'BUhi f'ni'Yf_YbbYb'i bX'g]W'ZØf']\fYb'GW i hn
Y]bni gYhnYb"

8]Y'gi Vhfc d]gWYb'F Y[Ybk Å`XYf



GWfY]hYb`G]Y`Xi fW`Y]b`[f0bYg`@UVmf]bh\ž`k`c`XUg`@]W`h`bi`f`]b`
gUbZ`h`Y`b`:`Y`W`_`Y`b`X`i`f`W`_`Y`]b`X`]W`h`Y`g`6`À`h`h`Y`f`X`U`W`_`Z`À`h`ž`i`b`X`X`Y`f`8`i`Z`h`
j`c`b`Z`Y`i`W`h`Y`f`9`f`X`Y`i`b`X`A`c`c`g`X`]Y`@`Z`h`Y`f`Z`0`h`_`X`]Y`F`Y`[`Y`b`k`À`X`Y`f`
B`Y`i`g`Y`Y`U`b`X`g`g`]b`X`Y`]b`F`Y`Z`[`j`i`a`_`X`Y`f`K`_`]X`b`]g`ž`X`U`g`X`]Y`G`Y`Y`Y`
V`Y`f`i`_\`[`h`i`b`X`X`Y`b`:`Y`]g`h`k`Y`W`_`h`"6`Y`g`c`b`X`Y`f`g`]a`_`5`V`Y`_`H`U`g`a`_`U`b`
B`U`h`]c`b`U`d`U`f`_`U`b`_`X`Y`f`B`c`f`X`g`d`]h`n`Y`_`X`Y`f`G`0`X`]b`g`Y`_`c`Z`Y`b`V`U`f`h`g`]W`_`Y`]b`Y`
@`U`b`X`g`W`_`U`Z`ž`X`]Y`j`c`b`0`d`d`[`Y`a`_`:`f`0`b`i`b`X`Y`]b`Y`f`i`b`j`Y`f`[`_`Y`]W`_`]W`_`Y`b`
6`]c`X`]j`Y`f`g`]h`À`h`[`Y`d`f`À`[`h`]g`h`"<`Y`f`ž`k`c`[`c`_`X`Y`b`Y`_`G`h`f`À`b`X`Y`_`U`i`Z`
g`a`_`U`f`U`[`X`[`f`0`b`Y`_`K`_`À`_`X`Y`f`_`h`f`Y`Z`Y`b`ž`g`W`_`Y`]b`h`X`]Y`_`B`U`h`i`f`_`Y`]b`_`A`_`Y`]g`h`Y`f`k`_`Y`f`_`
U`i`g`:`U`f`V`Y`b`i`b`X`:`c`f`a`_`Y`b`[`Y`g`W`_`U`Z`Y`b`ni`_`_`U`V`Y`b`"8`]Y`g`Y`[`Y`a`_`À`»`][`h`Y`b`
F`Y`[`Y`b`k`_`À`_`X`Y`f`ž`X`]Y`g`]W`_`X`i`f`W`_`\`c`\Y`_`B`]Y`X`Y`f`g`W`_`À`[`Y`i`b`X`_`a`_`]X`Y`
H`Y`a`_`d`Y`f`U`h`i`f`Y`b`_`U`i`g`n`Y`]W`_`b`Y`b`ž`V`]Y`h`Y`b`_`Y`]b`Y`b`_`@`Y`V`Y`b`g`f`U`i`a`_`Z`0`f`
i`b`n`À`_`\`][`Y`_`5`f`h`Y`b`i`b`X`_`U`X`Y`b`_`X`U`n`i`_`Y`]b`ž`]b`_`Y`]b`Y`_`K`_`Y`_`h`_`Y`]b`n`i`h`U`i`W`_`Y`b`ž`
X`]Y`j`c`f`_`@`Y`V`Y`b`_`b`i`f`_`g`c`_`d`i`_`g`]Y`f`h`"

8`Y`f`_`5`V`Y`_`H`U`g`a`_`U`b`_`B`U`h`]c`b`U`d`U`f`_`ž`_`V`Y`b`U`b`b`h`b`U`W`_`X`Y`a`
b`]Y`X`Y`f`_`À`b`X`]g`W`_`Y`b`_`9`b`h`X`Y`W`_`Y`f`ž`_`X`Y`f`_`%`*`(`&`_`U`_`g`_`Y`f`g`h`Y`f`_`9`i`f`c`d`_`À`Y`f`_`X`]Y`g`Y`
?`0`g`h`_`g`]W`_`h`Y`h`Y`ž`_`Y`f`g`h`f`Y`W`_`h`g`]W`_`0`V`Y`f`_`&`&`)`_`E`i`_`U`X`f`U`h`_]`_`c`a`_`Y`h`Y`f`i`b`X`_`]g`h`
V`Y`_`U`b`b`h`_`Z`0`f`_`g`Y`]b`Y`_`a`_`U`_`Y`f`]g`W`_`Y`b`_`K`_`U`b`X`Y`f`k`_`Y`[`Y`i`b`X`_`?`_`U`_`U`_`f`c`i`_`h`Y`b`"
8`Y`f`_`V`Y`f`0`_`a`_`h`Y`_`5`V`Y`_`H`U`g`a`_`U`b`_`7`c`U`g`h`_`H`f`U`W`_`ž`_`Y`]b`Y`f`_`X`Y`f`:`f`Y`U`h`_`K`_`U`_`g`
B`Y`i`g`Y`Y`_`U`b`X`g`ž`_`Z`0`_`f`h`X`i`f`W`_`X`]W`_`h`Y`_`K`_`À`_`X`Y`f`ž`_`j`_`c`f`V`Y`]`U`b`_`j`_`Y`f`g`h`Y`W`_`h`Y`b`
6`i`W`_`h`Y`b`i`b`X`_`Y`b`h`_`U`b`[`_`g`h`Y`]`Y`f`?`_`]d`d`Y`b`_`a`_`]h`_`U`h`Y`a`_`V`Y`f`U`i`_`V`Y`b`X`Y`b`
5`i`g`V`_`]W`_`Y`b`_`U`i`Z`_`X`U`g`_`H`U`g`a`_`U`b`]g`W`_`Y`_`A`_`Y`Y`f`"8`]Y`_`J`_`Y`[`_`Y`h`U`h`]c`b`_`\`_`Y`f`_`]g`h`"

Y]b`A cgU]_`Ui g`c\Yb`6Ui a ZUfbYbž`X]Y`k]Y`F`Y`_]hY`Ui g`XYf`i fnY]h
k]f_Ybž`i bX`a`ÀW`h][Yb`G`W`Y]bVi W`Ybž`XYfYb`Gh`A`a`Y`c`Z`h`j`cb
Y]bYa`X]W`hYb`HYdd]W`Ui g`A`ccg`i`bX`:`Y`W`hYb`ØVYfnc[Yb`g]bX`"
8]YgY`DZ`Ub`nYb`k`Y`h`g`W`U`Z`h`Y]bY`5`ha`c`gd`\`À`f`Y`ž`X]Y`Z`U`gh`a`U[]g`W`
U`ba`i`hY`hž`U`g`k`Ø`f`X`Y`a`U`b`X`i`f`W`Y`Y]b`A`À`f`W`YbVi W`k`U`b`X`Y`fb`"

8]Y`F`Y`[Ybk`À`X`Y`f`X`Y`g`D`U`f`_`g`g]bX`b]W`h`i`b`i`f`j`]gi`Y`V`Y`Y]bXfi`W`_`Y`b`X`ž
gcb`X`Y`fb`Ui`W`Y]b`<`c`h`g`d`c`h`X`Y`f`6]c`X]j`Y`f`g]h`À`h`"J`Ø[Y`k`]Y`X`Y`f`Hi`]
a`]h`g`Y]bYa`a`Y`c`X]g`W`Yb`];`Y`g`Ub[`i`b`X`X`Y`f`b`Yi` []Y`f][Y`K`Y`_`U`ž`Y]b
Zi` [i`b`Z`À`][Y`f`F`U`Y`b`j`c[Y`ž`V`Y] `Ø`_`Y`fb`X]Y`6`Ui`a`_`f`cb`Yb`i`b`X`X`Y`b
K`U`X`V`c`X`Y`b`"5`b`X`Y`b`?`Ø`gh`Y`b`X`Y`g`D`U`f`_`g`U`gg`Y`b`g]W`c`Z`h
B`Yi`g`Y`Y`À`b`X]g`W`Y`G`Y`Y`V`À`f`Y`b`i`b`X`[Y`Y`[Y`b`h]W`8`Y`Z]b`Y
V`Y`c`V`U`W`h`Y`b`ž`X]Y]b`X`Y`b`_`U`f`Y`b`];`Y`k`À`g`g`Y`fb`g`d]Y`Y`b`"8]Y`K`À`X`Y`f`
g`Y`V`gh`V]Y`h`Y`b`G`W`i`h`n`Z`Ø`f`Y]b`Y`J`]Y`n`U`\`Y`b`X`Y`a`]g`W`Y`f`5`fh`Y`b`ž
X`U`fi`b`h`Y`f`g`Y`h`Y`b`Y`b`g`Y`_`h`Y`b`i`b`X`_`Y]b`Y`F`Y`d`h]`Y]b`ž`X]Y`g]W`U`b`X]Y
Z`Yi`W`h`Y`b`ž`a`]X`Y`b`6`Y`X]b[i`b[Y`b`U`b[Y`d`U`g`gh`\`U`V`Y`b`"8]Y`g`Y`J`]Y`Z`U`h`
]gh`Y]b`N`Yi` [b]g`X`Y`f`Ø`_`c`c[]g`W`Y`b`6`Y`X`Yi`h`i`b[`g`c`W`Y`f`
@`Y`V`Y`b`g`f`À`i`a`Y`ž`X]Y`h`f`c`h`n`[Y`f]b[Y`f`Y`f`5`fh`Y`b`f`Y]W`Y`]a`J`Y`f[`Y]W`n`i
h`f`c`d]g`W`Y`b`F`Y[Ybk`À`X`Y`fb`Y]b`Y`Y]b`n][U`f`h][Y`B`]g`W`Y`]b`X`Y`f`B`U`h`i`f`
V]`X`Y`b`"

=a` ;`Y[Y`bg`U`h`n`i`n`i`X`Y`b`h`f`c`d]g`W`Y`b`F`Y[Ybk`À`X`Y`fb`ž`X]Y`c`Z`h`X`i`f`W`
Yi`h`f`Ya`Y`<`]h`n`Y`i`b`X`:`Yi`W`h][_`Y]h[Y`d`f`À[h`g]b`X`ž`n`Y]W`b`Y`b`g]W`X`Y
[Ya`À»][h`Y`b`i`b`X`g`i`V`h`f`c`d]g`W`Y`b`F`Y[Ybk`À`X`Y`f`B`Yi`g`Y`Y`U`b`X`g`X`i`f`W`
Y]b`_`Ø`\`Y`f`Y`g`?`]a`U`Ui`g`ž`a`]h`À`\`f]W`Y`b`B`Y`X`Y`f`g`W`À[Y`b`n`k`]g`W`Y`b`
%)`\$`\$`i`b`X`Ø`V`Y`f`&`\$`\$`\$`A`j`]a`Y`h`Y`fb`"K`]Y`a`U`b`V`Y]`K`]_`d`Y`X]U`
b`U`W`Y`g`Y`b`_`U`b`b`ž`g]b`X`X]Y`g`Y`K`À`X`Y`f`Y]b`Y`:`c`f`h`g`Y`h`n`i`b[`h`f`c`d]g`W`Y`f`
N`c`b`Y`b`]b`g`i`V`h`f`c`d]g`W`Y`6`f`Y]h`Y`b`ž`Y`X`c`W`a`]h`k`Y`b][Y`f`Yi`h`f`Ya`Y`b`
6`Y`X]b[i`b[Y`b`i`:`f`Ø`gh`Y`g]b`X`\`Y`f`b`U`\`Y`n`i`i`b`V`Y`_`U`b`b`h`"8]Y`
J`Y[Y`h`U`h]c`b`n`Y][h`g]W`]b`a`Y`\`f`Y`f`Y`b`G`W`]W`h`Y`b`ž`a`]h`Y]b`Ya`X]W`h`Y`b`
?`f`c`b`Y`b`X`U`W`ž`X`U`g`j`c`b`\`c`\`Y`b`6`À`i`a`Y`b`V]g`n`i`i`)`\$`A`Y`h`Y`fb`[Y`V]`X`Y`h`
k`]f`X`ž`i`b`X`Y]b`Y`f`i`b`h`Y`f`g`h`c`f`m`ž`X]Y`f`Y]W`U`b`@]U`b`Y`b`i`b`X`9`d]d`\`m`h`Y`b`
]gh`6`Y`g`c`b`X`Y`f`g`Ui`Z`Z`À`][`g]b`X`X]Y`6`Ui`a`Z`U`fb`Y`ž`X]Y]b`X]Y`g`Y`b`
K`À`X`Y`fb`Y]b`Y`a`U`f`_`U`b`h`Y`F`c`Y`Y`g`d]Y`Y`b`i`b`X`X`Y`f`@]U`b`X`g`W`U`Z`h`Y]b`
i`fn`Y]h]W`Y`g`:`U]f`j`Y`f`Y]\`Y`b`"

8]Y`6]c`X]j`Y`f`g]h`À`h`X`Y`g`5`V`Y`H`U`g`a`U`b`B`U`h]c`b`U`d`U`f`_`g`k`]f`X`X`i`f`W`X`Y`
B`À`Y`n`i`a`A`Y`Y`f`b`c`W`j`Y`f`g`h`À`f`h`"8]Y`g`U`n`\`U`h][Y`@`Z`h`i`b`X`X]Y`

ZYi W\hYb`K]bXYž`X]Y`j cb`XYf`HUga Ub]gW\Yb`GYY`YfØVYfk Y\Ybž
gW\UZZYb`Y]b`A]_fc_`a Už`XUg`XUg`K UW\ghi a`j cb`A ccgYb`i bX
: `YW\hYb`ZØfXYfhž`X]Y`bU\Yni`YXYb`j YfZØ[VUfYb`FUi a`VYXYW_Yb"
8]YgY`6YX]b[i b[Yb`i bhYfghØhnYb`Ui W\`Y]bY`J]Y`nU\`j cb
DZUbnybž`X]Y`b]f[YbXk c`gcbgh]b`X]YgYf`cfa`ni`Z]bXYb`g]bXž`i bX
V]YhYb`B U\fi b[`gck]Y`GW\i hn`ZØf`X]Y`Y]a]gW\Y`H]Yfk Y`h"
K UbXYfYfž`X]Y`XYb`7cUgh`HfUW_Yb`h`Ub[[Y\Ybž`\ØfYb`cZi`XUg
F UgW\Y`b`_`Y]bYf`J Ø[Y`cXYf`XUg`ZYfbY`Fi ZYb`XYg`6Y`V]fXž`XYggYb
; YgUb[`k]Y`; `cW_Yb`_`Àb[Y`Xi fW`X]Y`K`À`XYf`\U`h"

BYVYb`XYa`5VY`HUga Ub`BUh]cbU`dUf`_`Z]bXYb`g]W\`À`b`]W
VYY]bXfi W_YbXY`FY[Ybk`À`XYf`Ui W`]b`UbXYfYb`HY]`Yb
BYi gYY`UbXgž`Yhk U`ja`j]cfX`UbX`cXYf`Ui Z`XYf`K Ygh`ØghY`XYf
GØX]bgY`ž`k c`X]Y`B]YXYfgW`À[Y`bcW`Y`Ø`Yf`g]bX`i bX`X]Y`K`À`XYf
Y]bY`ZUgh`i bXi fW`Xf]b[`]W`Y`8]W\hY`YffY]W\Yb`"8cW`5VY`HUga Ub
VYgh]W\h`Xi fW`gY]bY`Ni [`Àb[`]W`_Y]h`i bX`X]Y`J`YfV]bXi b[`j cb
K U`X`i bX`A`YYfž`X]Y`?U`U`_ZU`fYfb`X]Y`A`Ø[`]W`_Y]h`V]YhYhž
j YfghYW`hY`@U[i bYb`ni`Yf`_i bXYbž`k`À`fYbX`K UbXYfYf`Ui Z`XYb
Gdi fYb`XYf`BUhi f[YgW]W\hY`k UbXYb`"8]YgY`FY[Ybk`À`XYf`g]bX
b]W\h`bi`f`Y]b`F`ØW`ni [gcfh`ZØf`X]Y`GYY`Yž`gcbXYfb`Ui W\`Y]b
`YVYbX][Yg`@UVcf`XYf`9j c`i h]cbž`XUg`X]Y`5bdUggi b[gZ`À][_Y]h`XYg
@YVYbg]b`U`gY]bYb`i: UW`hhYb`nY][h"

Ghf`À`b`XY`i`b`X`?`ØghYb`]b]Yb



6UfZi » ØVYf'GUbXžXYf'i bhYf'XYb': Ø» Yb'_b]fgW h'k]Y'Y]b
; Y\Y]a b]g'Ui g'i fU'hYb'NY]hYbž'k À\fybX'X]Y'K Y''Yb'Y]bY'YbX'cgY
A Y'cX]Y'gd]Y'Yb' 'X]Y'GhfÀbXY'BYi gYY'UbXg'g]bX'b]W h'bi f'c fhY
XYf'9f\c'i b[ž'gcbXYfb'Ui W\': YbghYf'']b'X]Y' [Yc'c[]gW Y
; YgW]W hY'XYf'9fXY''5b'XYb'?ØghYb'X]YgYg'@UbXYgž'k c'XYf
DUn]Z]_Ui Z'XfUa Uh]gW Y': Y'gZcfa Uh]cbYb'hf]Zhž'Z]bXYb'g]W
?ØghYbUVgW b]hYž'X]Y'a]h']\fYf'GW Òb\Y]hi bX'9]bn][Ufh][_Y]h
j YfnUi VYfb''C V'Yg'XYf'k]'XYž'i b[YnÀ\ a hY'7\Ufa Y'j cb'D]\U
6YUW]'gh'cXYf'X]Y'a mgh]gW Y'9'Y[Ubn'j cb'7Uh\YXfU'7cj Yž'X]YgY
GhfÀbXY'V]YhYb'k Y]h'a Y\ f'U'g'bi f'GcbbY'i bX'A Yf''G]Y'g]bX
NYi [b]ggY'j i '_Ub]gW Yf'?fÀžhY'i bX'XYf'i bYfa ØX']W Yb'5fVY]hj cb
K]bX'i bX'K UggYfž'X]Y'ØVYf'A]''cbYb'š\fy'\]bk Y['?i bghk Yf_Y
Ui g'GhY]b'i bX'GUbX' [YgW UZZYb'\UVYb''

6Y[]bbYb'k]f'Ub'XYf'K Ygh_ØghY'XYf'BcfX]bgY'ž'Yhk U'(\$'?)`ca YhYf
k Ygh]W]'cb'5i W'_UbXž'k c'D]\U'6YUW 'a]h'gY]bYa 'a Uf'_UbhYb
gW k UfnYb'GUbX'6Ygi W Yf']b'gY]bYb'6Ubb'n]Y'h''8]YgYf'GhfUbXž
XYggYb'B Ua Y']b'XYf'GdfUW Y'XYf'A Ýcf]' HY'D]\U ' 'X]Y' [YhY]'hY
K Y''Y'Y]bYg'? Ubi g' 'VYXYi hYhž'ghY]b'DfcXi _hj i '_Ub]gW Yf'
5_hj]hÀž'X]Y'j cf'A]''cbYb'š\fy'b'X]Y'F Y[]cb'dfÀ[hY''8Yf'\c\Y
9]gYb[Y\U'h'XYg'GUbXgž'XYf'gc[Uf'a U[bYh]gW Y'9][YbgW UZhYb
VYg]hnhž'j Yf'Y]\h'\a 'gY]bY'Xi b_Y': UfVY'i bX'Yfk Àfa h'g]W 'gY'Vgh
Ub'VYk Ò'_hYb'HU[Yb'gdØfVUf' 'VY]'GcbbYbgW Y]b'g]bX'GW i \Y

fUhgUa "i a [YVYb j cb XYb fUi Yb K U]hU_YfY F Ub[Yg i bX
ØVYffU[hij cb XYf]_cb]gWk Yb : Y`gZcfa Uh]cb`@]cb`F cW_žV]YhYh`D)\ U
Y]bY`k]XYŽi b[YVÅbX][hY`@UbXgWk UZh`X]Y`VYgcbXYfg`Gi fZYf
Ubn]Y`h" 8]Y`ghUf_Yb`GhfÒa i b[Yb`a UWk Yb`XUg`GWk]a a Yb`ZØf
l bYfZU\ fYbY`YXcW`f]g_Ubh`k Yg\U`V`F Yhhi b[ggWk]a a Yf`]b`XYb
Gca a Yfa cbUhYb`dfÀgYbh`g]bX": Øf`k Y]hYfY`9]bV`]W_Y`]b`X]Y
6YgcbXYf\Y]hYb`X]YgYg`GhfUbXYg`i bX`H]ddg`ni f`5bfY]gY`c`b`h`g]Wk
Y]b`6`]W`_Ui Z**A mE i YYbgk b`8]Ufmž`k c`XYhU]`]]YfhY**
=bZcfa Uh]cbYb`ni `5_hj]hÅhYb`i bX`l bhYf_ØbZhYb`ni `Z]bXYb`g]bX"

BVYb`XYa`Gi fZYb`UXYb`K UbXYfk Y[Y`]b`XYf`l a [YVi b[`ni
9f_i bXi b[Yb`Y]bž`Yhk U`ni`XYb`bU\Y[Y`Y[YbYb`?UfY_UfY` : U`gž
k Å\ fYbX`5i gg]Wk hgd i b_hY`k]Y`XYf`D]\ U`6YUWk`@cc_ci h
gdY_hU_i`ÀfY`6`]W_Y`Ui ZX]Y`hcgYbXY`GY`YfÒZbYb`" 8]Y`fUi Y
GWk`Òb\Y]h`XYg`gWk UfnYb`GUbXg`_cbhfUgh]Yfh`a]h`XYf`Ødd][Yb
JY[YhUh]cb`XYf`i a`]Y[YbXYb`<Ø[Y`ž`X]Y`Xi fWk`XYb
a]bYfU`fY]Wk Yb`6cXYb`[YXY]\h`D]\ U`]gh`b]Wk h`bi f`Y]b`C`fh`ZØf
5VYbhYi Yfž`gcbXYfb`Ui Wk`Y]b` : YbghYf`]b`X]Y`j i`_Ub]gWk Y
JYf[Ub[Yb\Y]h`BYi gY`Y`UbXgž`k c`X]Y`9fXY`]\ fY`fc\Y`?fUZh`b
YXYa`?ØfbWk Yb`GUbX`cZZYbVUfh`"6YgcbXYfg`VY]
GcbYbi bhYf[Åb[Ybž`k Ybb`XYf`<]a a Y`]b`ZUa a YbXYb` : UfVYb
ØVYf`XYa`A YfY`YfghU`hž`nY][h]g]Wk`X]Y`A U[]Y`X]YgYg`C`fhYg`]b
j c`Yf`DfUWk`h"

K Y]hYf`Ògh]Wk`ž`Ub`XYf`7cfca UbXY`!<U`V]bgY`ž`k UfhYh`7Uh\YXfU`
7cj Y`a]h`Y]bYf`[Ubn`UbXYfYbž`ZUgh`Åh\Yf]gWk Yb`5bn]Y\i b[g_fUZh`
8]YgYf`GhfUbXž`XYf`HY`XYg`HY`K \Ub[Ubi]!5!<Y`A Uf]bY`F YgYfj Y
]ghž`VYY]bXfi W_h`a]h`gY]bYa`k Y]» Yb`GUbX`i bX`hØf_]gZUfVYbYa
K UggYfž`XcWk`XUg`k U\ fY`<][\`][\h`]gh`X]Y`bUhØf`]Wk Y
: Y`gZcfa Uh]cbž`X]Y`XYa`C`fh`gY]bYb`B Ua Yb`[]Vh`9]b`[][Ubh]gWk Yfž
_Uh\YXfU`YbUfh][Yf`6c[Yb`Ui g`?U`_ghY]bž`Xi fWk`X\fhUi gYbXY`j cb
9fcg]cb`[YZcfa hž`Yf\YVh`g]Wk`ØVYf`XYa`GhfUbX`i bX`fU`a h`XUg
A YfY`k]Y`Y]b`Hcf`ni`Y]bYf`UbXYfYb`K Y`h`6Ygi Wk`Yf`YffY]Wk Yb
X]YgYb`a U[]gWk Yb`C`fh`ØVYf`Y]bYb`a U`Yf]gWk Yb`K UbXYfk Y[`j cb
Yhk U`() `A]bi hYb`UV`<U\Y]`6YUWk`cXYf`dYf`?U`U_ž`k Ug`X]Y
XfUa Uh]gWk Y`?ØghYb`]b]Y`Ui g`Y]bYf`bYi Yb`DYfgdY_hj Y`nY][h`8]Y
[Yc`c`[]gWk Y`6YgcbXYf\Y]h`XYg`6c[Ybgž`_ca V]b]Yfh`a]h`XYb
i a`]Y[YbXYb`?]ddYb`i bX`<Ò\Ybž`a UWk`h`7Uh\YXfU`7cj Y`ni

Y]bYa `VY`]YVhYb`8fY\cfh`Yhk U`ZØf`:]`a Y`k]Y` 8]Y`7\fc]_Yb
j cb`BUfb]U "

8]Y`9bhghY\i b[`X]YgYf`: cfa Uh]cbYb`YfnÅ\`hj cb`XYf
i bYfa ØX`]WYb`5fVY]h`XYg`A YfYgž`XUg`XYb`k Y]WYb`? U`_ghY]b
ØVYf`ÿcbYb`\]bk Y[`Ui g\Ø\`hY" `a `K UggYf`gY`Vghj YfVYf[Yb`g]W
: Y`gVYW_Ybž`X]Y`VY]`9VVY`_`Y]bY`² _cgmghYa Y`cZYbVUFYbž
k Å\fybX`X]Y`i a `]Y[YbXYb`? `]ddYb`cZhj cb`GYj Ø[Y`b`VYj Ø`_Yfh
g]bX" `7Uh\YXfU`7cj Y`]gh`b]W`h`bi f`Y]b`C fh`XYf`GW`Öb\Y]hž`gcbXYfb
Ui W`XYf`Fi \Y` `hfcm`gY]bYf`Dcdi `Uf]hÅh`Z]bXYb`g]W`c`Zhgh]`Y
A ca YbhYž`VYgcbXYfg`ZfØ`Ua `A cf[Ybž`k Ybb`X]Y`YfghYb
GcbbYbghfU\`Yb`XYb`6c[Yb`]b`[c`XYbYg`@]W`h`hUi W`Yb" `8]Y
?ca V]bUh]cb`Ui g`[Yc`c[]gWYf`: Ugn]bUh]cb`i bX`bUhØf`]WYf
9`Y[Ubn`a UW`h`X]YgYb`GhfUbX`ni `Y]bYa `i bj Yfn]W`hVUFYb`N]Y`ZØf
YXYbž`XYf`X]Y`?ØghYb`BYi gYY`UbXg`Yf_i bXYb`a ØW`hY"

8]Y`GhfÅbXY`XYg`@UbXYg`g]bX`gc`j]Y`ZÅ`h][`k]Y`X]Y`?fÅZhYž`X]Y`g]Y
Zcfa hYb" `J cb`XYb`j i `Ub]gWYb`Gdi fYb`]b`D]\Už`k c`XYf`gW`k UfnY
GUbX`i bhYf`XYb`: Ø» Yb`[`Ø\hž`V]g`ni `XYb`_i bghj c`Yb`9fcg]cbYb
j cb`7Uh\YXfU`7cj Yž`k c`XUg`A YfY`XYb`GhY]b`k]Y`Y]b`6]`X\Ui Yf
VYUfVY]hYh`\Uhž`V]YhYb`X]YgY`?ØghYbUVgW`b]hY`Y]bYb`9]bV`]W_]b
X]Y`XmbUa]gWY`; YgW]W`hY`XYf`9fXY" `X`XYf`K Y`Yb`gW`U[ž`YXYf
: Y`gj cfgdfi b[``ÅXh`XUni `Y]bž`X]Y`fc\Y`9bYf[]Y`XYf`BUhi f`ni
gdØfYb`i bX`X]Y`NY]h`ZØf`Y]bYb`A ca Ybh`ni `j Yf[YggYb"

8]Y`A Ucf]? i `hi f`i bX`BUhi f



< ÆfYb`G]Y`XYb`K]bXž`XYf`ØVYf`X]Y`6Yf[Y`ghfY]W hž`i bX`gdØfYb`G]Y
XYb`Di`g`XYf`9fXY`i bhYf`ÆfYb` : Ø» Yb` `]b`BYi gYY`UbX`]gh`X]Y
BUhi`f`b]W h`bi`f`?i` `]ggYž`gcbXYfb`Y]b`YVYbX][Yf` ; Y]ghž`XYf`h]YZ`]b
XYf`?i` `hi`f`XYf`A`Ýcf]`j`Yfk`i`fn`Y`h`]gh` : Øf`X]YgYg`]bX][YbY`J`c`_ž
XYggYb`K`i`fn`Y`b`V]g`ni`XYb`dc`mbYg]gW`Yb`GYYZU`fYfb
ni`fØW`fY]W`Ybž`X]Y`j`cf`ØVYf`+\$`\$`Δ`fYb`X]YgY`ÆgY`b`VYg]YXY`hYbž
g]bX`@UbXž`A`YYf`i`bX`<]a`a`Y` `Y`][Y` ; YZ`Δ`fhYb`" `ÆfY
K`Y`h`UbgW`Ui`i`b[ž`VY`_Ubbh`U`g`A`Ýcf]`hUb[Už`Xi`fW`Xf]b[h`Y`XYb
5gdY`_h`XYg`@YVYbg`i`bX`g]Y`h`X]Y`BUhi`f`U`g`i`bhYb`b`VUf`a`]h`XYf
a`YbgW` `]W`Yb`9i`]ghY`bn`j`Yfvi`bXYb`"6Yf[Y`hfU[Yb`X]Y`BUa`Yb`j`cb
5`b`Ybž` : ØggY`g]bX`@YVYbgUXYfbž`i`bX`K`À`XYf`VYf[Yb
 ; YgW`]W`hYbž`X]Y`ØVYf` ; YbYfUh]cbYb` `]bk`Y[`k`Y]hYf[Y[YVYb
k`YfXYb`"8]YgY`h]YZY`J`Yfvi`bXYb`Y]h`dfA[h`b]W`h`bi`f` `]fY
Gd]f]hi`U`]h`hž`gcbXYfb`Ui`W` `]`fY`HfUX]h]cbYbž`X]Y`V]g` `Yi`hY`]b
< Ufa`cb]Y`a`]h`XYf`I`a`k`Y`h`[Y`YVh`k`YfXYb`"

9]b`nYbhfU`Yf`6Y[f]ZZ`]b`X]YgYf`K`Y`h`UbgW`Ui`i`b[`]gh`?`U]h]U`_]hUb[Už
X]Y`J`YfUbhk`cfhi`b[`U`g`< ØhYf`XYf`BUhi`f`" : Øf`X]Y`A`Ýcf]`VYXYi`hYh
X]Ygž`XUg`@UbX`b]W`h`ni` `VYg]hnYbž`gcbXYfb`Yg`ni` `VYk`U`fYb` `Y]bY
DZ]W`hž`X]Y`Ui`g`XYf` , VYfnYi` [i`b[`Ybhgd]b[hž`XUgg`A`YbgW`i`bX
I`a`k`Y`h`Y]bg`g]bX`"8]YgY`D` `]cgcd`Y`nY][h`g]W` `]b`XYf`gcf[Z`h][Yb
Bi`hni`b[`j`cb`fYggci`fW`bž`gY]Yg`VY]a` ` :]gW`ZUb[ž`XYf
@UbXk`]fhgW`UZh`cXYf`XYf`9fbhY`j`cb`< Y]`dZUb`nYb`"C`fhY`k`]Y`XYf

A]Zc fX'Gci bXž'XYb'g]Y'D]cd]c hU\]'bYbbYbž'g]bX'b]W h'bi f
`UbXgW UZh]W Y'K i bXYfž'gcbXYfb'Ui W'GhÀhYb'j cb'gd]f]hi Y`Yf
6YXYi hi b[ž'Ub'XYbYb'X]Y'?fÀZhY'XYf'GW ÒdZi b['gdØfVUf'g]bX"
F]hi U'Y'i bX'; YVYhYž'cZh'VY['Y]hYh'j cb'; YgÀb[Ybž'Y\ fYb'X]YgY
\Y'] [Yb'D'ÀhY'i bX'V]hYb'i a 'GW i hn'i bX'GY[Yb'j cb'XYb
; ÒhYfbž'X]Y']b'XYf'BUhi f'k c\ bYb"

8]Y'Gd]f]hi U']hÀh'XYf'A Ýcf]']gh'Yb['a]h'XYa ' ?cbnYdhj cb'A UbU
j Yf_bØdZž'Y]bYf'i bg]W hVUfYb'?fUZh'cXYf'5i hc f]hÀhž'X]Y']b
A YbgW Ybž'c fhYb'i bX'CV'Y_hYb']bbYk c\ b"9]b'6Yf['k]Y
5cfU_]#A ci bh'7cc_ž'XYf'\ ÒW ghY';]dZY`XYg'@UbXYgž'k]fX'b]W h
bi f'U'g'd\mg]gW Y'9f\YVi b[' [YgY\Ybž'gcbXYfb'U'g'J Yf_ØfdYfi b[
Y]bYg'5\ bYbž'XYggYb'A UbU'F YgdY_hi bX'9\ fZi fW h'Y]bZc fXYfh"
9VYbgc']gh'HUdi ž'XUg'Df]bn]d'XYf'<Y'] [_Y]hž'j cb'nYbhfU'Yf
6YXYi hi b[' 'VYgh]a a hY'c fhY'cXYf'CV'Y_hY'g]bX'hUVi 'i bX'XØfZYb
bi f'i bhYf'ghfYb[Yb'FY[Yb'VYhfYhYb'cXYf'VYfØ\ fh'k YfXYbž'i a
XUg'; 'Y]W [Yk]W h'a]h'XYf'gd]f]hi Y`Yb'K Y'h'ni 'k U\ fYb"8]YgY
, VYfnYi [i b[Yb'gd]Y[Yb'g]W]b'NYfYa cb]Yb'k]XYfž'X]Y'Ui ZXYa
A UfUYž'XYa '_ca a i bU'Yb'J YfgUa a 'i b[gc fhž'UV[Y\U'hYb
k YfXYbž'k c'X]Y'J YfV]bXi b['ni 'XYb'J cfZU\ fYb'i bX'ni f'BUhi f
Xi fW ; YgW]W hYbž'HÀbnY'k]Y'XYa ' <U_U'i bX'; YgÀb[Y [YZY]Yfh
k]fX"

HfUX]h]cbYb'XYf'A Ýcf]'g]bX'Ui W']b']\ fYf'6Yn]Y\ i b['ni f'BUhi f'U'g
E i Y`Y'XYg'@VYbg'j Yfk i fnY'h'K À\ fYbX'XYf'UfW U]gW Yb
DYf]cXYž'_i fn'bUW]\ fYf'5b_i bZhi a '% '\$\$'b"7\ f"ž'dUgghYb'g]Y
g]W 'Ub'X]Y'bYi Yb'I a k Y'hVYX]b[i b[Yb'Ubž']bXYa 'g]Y'DZUbnyb
k]Y'? a UfU'fGØ» _UfhcZZ'Ě'_i 'hj]YfhYb'i bX'X] [XhYW.b]_Yb'ZØf'X]Y
Y]b\Y]a]gW Y': Ui bU'Yb'hk]W_Y'hYb" ÆfY'; YgW]W hYbž'ØVYf']YZYfh
Xi fW 'K \U_UdUdU'f] YbYU'c[]YĚ'j Yf_bØdZYb'X]Y'<Yf'_i bZiXYg
Jc'_Yg'a]h'XYf'GW ÒdZi b['XYf'K Y'h'Xi fW ; ÒhYf'k]Y'HÝbY
A U\i hUž'XYb'; ch'XYg'K U'XYgž'XYf'XYb'YfghYb'A YbgW Yb'Zcfa hY"
8]YgY'a ØbX']W Yb', VYf']YZYfi b[Ybž'cZh'VY['Y]hYh'j cb'K \U_ fYfc
fZcfa Y`Yf'FYXY_i bghĚ'VYk U\ fYb'XUg'K]ggYb'ØVYf'X]Y
6YXYi hi b['j cb': ØggYbž'6Yf[Yb'i bX'K À'XYfb'U'g'E i Y`Yb'j cb
BU\fi b[ž'A YX]n]b'i bX'gd]f]hi Y`Yf'?fUZh"

8]Y'6Y[Y[bi b['a]h'XYf'A Ýcf]!?'i 'hi f'V]YhYh'FY]gYbXYb'Y]bY

Y]bn][Ufh][Y`A`Ò[`]W_X]hž`X]Y`BUhi`f`Xi`fW`Y]bY`UbXYfY`@]bgY`ni
gY\Yb" `b`C`fhYb`k`jY`F`chc`fi`Už`k`c`[`Y`ch\Yfa`U`U`_h]j`Y`Gh`hYb
VfcXY`bž`_`ÒbbYb`6Ygi`W`Yf`Ub`_i`hi`fY`Yb`9f`YVb]ggYb
hY]`bY`a`Ybž`X]Y`X]Y`h]Y`ZY`J`YfV]bXi`b[`nk`]gW`Yb`XYb`A`YbgW`Yb
i`bX`XYf`9fXY`j`YfXYi`h]W`Yb`_`gY]`Yg`Xi`fW`hfUX]h]cbY`Y`<`Ub[`]!
A`U`\nY]hYbž`VY]`XYbYb`GdY]gYb`]b`XYf`\Y]»`Yb`9fXY`[`Y[`Ufh
k`YfXYbž`cXYf`Xi`fW`[`YZ`Ø`fhY`Hci`fYbž`X]Y`X]Y`gd]f]hi`Y`Y
6YXYi`hi`b[`]XYf`@]UbXgW`UZh`Yf`_`ÀfYb" `K`Yf`a`Y`f`ØVYf`X]Y`fY]W`Y
;`YgW`]W`hY`i`bX`X]Y`K`YfhY`XYf`A`Ýcf]`YfZU`fYb`a`ÒW`hYž`Z]bXYh`Ui`Z
**K`_]`dYX]U`Y]bY`i`a`ZUggYbXY`_`VYfg]W`h`ØVYf`]`fY`HfUX]h]cbYbž`
j`cb`XYf`GdfUW`Y`HY`F`Yc`A`Ýcf]`V]g`\]b`ni`XYb`_i`hi`fY`Yb
K`]YXYfVY`YVi`b[`]Yb`XYf`a`cXYfbYb`ÝfU"**

8]Y`A`Ýcf]!F`YbU]ggUbW`XYf`%-`+\$Yf`i`bX`%-`,\$Yf`d\`fY`\`Uh`X]YgY
J`YfV]bXi`b[`]ni`f`BUhi`f`k`Y]hYf`[`Ygh`Àf`_hž]bXYa`_g]Y`dc`]h]gW`Yb
5_h]j]ga`i`g`i`bX`_i`hi`fY`Y`K`]YXYfVY`YVi`b[`]a`]h`XYa`_GW`i`hn`XYg
@]UbXYg`j`Yf`_b`Ød`ZhY" `?`cbnYdhY`k`]Y`i`hi`ž`XUg`GhfYVYb`bUW
5i`g[`]Y]W`ž`i`bX`H]_Ub[`]Už`X]Y`_i`hi`fY`Yb`K`YfhY`i`bX`6f`À`W`Yž
`Y]hYb`V]g`\Yi`hY`XUg`Ni`gUa`a`Yb`YVYb`i`bX`XYb`l`a`[`Ub[`]a`]h`XYf
l`a`k`Y`h" `8]YgY`Df]bn]d]Yb`Yf]bbYfb`XUfUbž`XUgg`X]Y`BUhi`f`b]W`h
bi`f`Y]bY`F`Yggci`fW`ž`gcbXYfb`Y]b`YVYbX][`Yf`DUf`hbYf`]ghž`XYf
F`YgdY`_hi`bX`DZY[`]Y`j`YfX]Yb`h" `8]Y`;`YgW`]W`hYbž`X]Y`]b`YXYa
: `i`ggž`YXYa`_6Yf[`]i`bX`YXYa`_K`U`X`ghY`W`_Ybž`g]bX`Y]b`YVYbX][`Yg
9fVYž`XUg`6Ygi`W`Yf`XUni`Y]b`ÀXhž`X]Y`K`Y`h`a`]h`bYi`Yb`5i`[`]Yb`ni
gY\Yb"

5_h]j]h`hYb`]b`XYf`BUhi`f`



GdØfYb`G]Y`XYb`F i ZXYf`K]`Xb]gžXYf`G]Y`\\]bUi`g`cW_hž`k`c`YXYf`
GW`f]hž`YXYf`DUXXY`gW`U[`i`bX`YXYf`Gd`f`i`b[`Y]b`bYi`Yg`
5VYb`hYi`Yf`j`Yfgd`f]W`h`i`BYi`gYY`UbXg`BUhi`fk`i`bXYf`g]bX`Y]b`
Gd]Y`d`Uhn`ZØf`C`i`hXcc`f!`9b`h`i`g]UghYb`ž`X]Y`XUg`<`Yfn`XYf`9f`XY`
\\Ui`hbU`Yf`YVYb`a`ØW`hYb`"A`]h`Y]bYf`@UbXgW`UZh`X]Y`j`cb`
gW`fc`ZYb`6Yf[`Yb`ØVYf`ga`UfU[`X[`fØbY`?`Yk`ÅggYf`V]g`\\]b`ni`h]YZYb`
GW`i`W`hYb`fY]W`hž`V]YhYh`X]YgYg`@UbX`i`bn`Å`\\][`Y`A`Ø[`]W`_Y]hYb`ž`
g]W`i`b`X]Y`BUhi`f`ni`ghØfnYb`"CV`G]Y`X]Y`<`Ø`Yb`Yf`_]a`a`Yb`ž`Xi`fW`
fi`\\][`Y`i`č`fXY`[`Y]hYb`c`XYf`g]W`i`b`X]Y`H]YZY`k`U[`Yb`ž`X]Y`J`]Y`ZU`h`
XYf`5`_hj`]h`hYb``Åggh`_Y]bY`K`ØbgW`Y`c`ZYb`"DUW`_Yb`G]Y`≡`fY`
K`UbXYfgW`i`\\Yž`gW`bUddYb`G]Y`Y]b`DUXXY`c`XYf`gUa`a`Y`b`G]Y`A`i`h`
ZØf`XYb`i`h]a`Uhj`Yb`5XfYbU`]b`_W`_`\\]Yf`k`UfhYh`X]Y`i`b[`Yn`Å`\\a`hY`
GW`Øb`\\Y]h`Ui`Z`G]Y`"

:`Øf`K`UbXYf`]YV`\\UVYf`ØZbYb`g]W`i`b`BYi`gYY`UbX`DZUXYž`X]Y`Xi`fW`
Y]b][`Y`XYf`gdY`_hU`_i`ÅfghYb`@UbXgW`UZhYb`XYf`K`Y`h`ZØ`\\fYb`"8`Yf`
Hcb[`Uf]fc`5`d]bY`7fcgg]b[`ž`c`Zi`U`g`Y]bYf`XYf`VYghYb`
HU[`Ygk`UbXYfk`Y[`Y`k`Y`hk`Y]h[`YZY]Yfhž`gW`Åb[`Y`h`g]W`X`i`fW`XYb`
Hcb[`Uf]fc!`BUh]cbU`dUf`_i`bX`V]YhYh`UhYa`VYfUi`VYbXY`5i`gV`]W`_Y`
Ui`ZU`_hj`Y`J`i`_UbY`i`bX`ga`UfU[`X[`fØbY`?`fUhYfgYb`"8`]YgY`Yhk`U`
%-`ž`(`?)`ca`YhYf`Ub[`Y`GhfYW`_Y`ZcfXYfh`a`]h`ghY`]Yb`5bgh]Y[`Yb`i`bX`
k`YW`gY`\\UZhYa`K`YhYfž`VY`c`\\b`h`YXcW`a`]h`Y]bYf`A`cbX`UbXgW`UZh`
Ui`g`@Uj`U`i`bX`5gW`Yž`X]Y`k`]Y`Ui`g`Y]bYf`UbXYfYb`K`Y`h`k`]f`_h`"

9VYbgc`VYY]bXfi W_YbX`]gh`XYf`A`]ZcfX`HfUW`_ja` :]cfX`UbX!
BUh]cbU`dUf_žY]b`a` Y`fhÅ[] [Yf`K` Y [ž`XYf`Xi` fW`X`]W`hY
FY [Ybk`À`XYf`i` bX`j` cfVY]`Ub`hcgYbXYb`K` UggYfZÀ`Yb`k`]Y`XYb
Gi`h`Yf`UbX` : U`g`ZØ\fhž`VYj`cf`Yf`Ua` `a` U`YghÅh]gW`Yb`A`]ZcfX
Gci`bX`YbXYh`"8`]YgY`F`ci`hYbž`HY]`XYf`VYfØ\`a`hYb` ; fYUh`K` U`gž
YfZcfXYfb`J`cfVYfY]hi`b[`i`bX`c`Zh`Y]bY`6i`W`i`b[`]a`J`cfUi`gž`XcW`
g]Y`UggYb`K` UbXYfYf`X]Y`fc`Y`?`fUZh`XYf`B`Uhi`f`a`]h`YXYa`G`W`f]h
gdØfYb"

K`Yf`X]Y` ; Yk`ÀggYf`BYi`gYY`UbXg`Yf`_i`bXYb`a` ØW`hYž`Z]bXYh]a
?`U`U`_ZU`fYb`Y]bY`dYfZY`_hY`A`Ø[`]W`_Y]hž`j`YfghY`W`_hY`G`W`Å`hnY`ni
Yb`hXY`W`_Yb`"1`a` [YVYb`j`cb`XYf`HUga`Ub]gW`Yb`GYY`i`bX`XYa
DU`n]Z]gW`Yb`C`nY`Ub`V]Y`hY`h`X`Ug`@`UbX`i`bn`Å`\`][`Y`GY`Ybž` : `ØggY`i`bX
?`ØghY`b`UV`gW`b]h`hY`ž`X]Y`g]W`_]XYU`ZØf`DU`XXY`h`ci`fYb`Y][`bYb`"`-a
5VY`H`Uga`Ub`B`Uh]cbU`dUf`_`_ØbbYb`G]Y`Yb`h`Ub[`XYf`[`c`XYbYb
Ghf`ÅbXY`i`bX`Xi`fW`X`hØf`_gZUfVYbY`6i`W`hYb`[`Y]hYbž`j`cfVY]`Ub
 ; fUb]hZY`gYb`i`bX`X]W`hYb`K`À`XYfbž`k`À`fYbX`G]Y`j`]Y`Y]W`h`8`Y`Z]bY
cXYf`GY`YV`ÅfYb`g]W`hYb`"9]bY`k`Y]hYfY`ZUgn]b]YfYbXY`F`ci`hY`ZØ\`fh
Xi`fW`X`Yb`A`]ZcfX`Gci`bX`ž`k`c`ghY]Y` : Y`gk`ÅbXY`i`bX`K`UggYfZÀ`Y
Y]bY`gi`ffY`U`Y`?`i`]ggY`V]XYb`"5bV]Y`hYf`k`]Y`5VY`H`Uga`Ub`?`UmU`_g
cXYf`7`Uh`Y`XfU`"7`cj`Y`?`UmU`_`H`ci`fg`V]Y`hYb`[`Y`ZØ\`fhY`H`ci`fYb`Ubž`X]Y
gck`c`\`ZØf`5bZ`Åb[`Yf`U`g`Ui`W`X`ZØf`YfZU`fYbY`DU`XX`Yf`[`YY][`bYh
g]bX`" : Øf`XY`hU]`Y]fhY`≠`Zc`fa`Uh]cbYb`ni`XYb`VY`ghYb`?`U`U`_n]Y`Yb
i`bX`5bV]Y`hYfb`"c`b`h`g]W`_Y]b`6`]W`_Ui`Z`**F`c`j`Y`"a`Y`ž`k`c`G]Y**
9a`dZY`\`i`b[`Yb`i`bX`gU]gcbU`Y`H]ddg`Z]bXYb`"8]Y`k`Åfa`ghYb`A`cb`UhY
≠`bi`Uf`i`bX` : YVfi`Uf`g]bX`]XYU`ž`UVYf`Ui`W`_Ui`»`Yf`U`V`X]YgYf`NY]h
V]Y`hYb`X]Y` ; Yk`ÀggYf`i`bj`Yf[`Ygg`]W`X`Y`9f`YVb]ggYž`k`Ybb`X`Ug`K`Y`hYf`
a`]hgd]Y`h"

:`Øf`5XfYbU`]b`↑`b`_]Yg`\`À`h`BYi`gYY`UbX`Y]bY`5`_h]j`]h`Å`h`VYfY]hž`X]Y
k`Y`hk`Y]h`\`fYg[`Y]W`X`Yb`gi`W`h`6i`b[`YY!`š`a`d]b[`E`i`YYb`gh`ck`bž`c`Zh
U`g`5VYb`hY`Yf`U`i`d`hgh`UX`h`XYf`K`Y`h`VY`nY]W`X`bY`hž`]gh`XYf` ; YVi`fhgc`fh
XYg`_ca`a`Yfn]Y`Yb`6i`b[`YY!`š`a`d]b[`gž`i`bX`XYf`BYj`]g`6i`b[`m]gh
Y]bY`XYf`gdY`_hU`_i`ÅfghYb`C`dh]cbYb`"A`]hY]bYa`Gdfi`b[`Ui`g`%` (
A`Y`hYfb`<`Ø`Y`ØVYf`XYf`UhYa`VYfUi`VYbXYb`BYj`]g!`G`W`_i`W`h`Yf`VYVb
G]Y`Y]bYb`ZfY]Yb` : U`"j`cb` , ž`)`GY`_i`bXYbž`XYf`≠`f`<`Yfn`fUgYb`"Àgg`h"
8]Y`6Y`hYf]VYf`gc`f[`Yb`a`]h`d`fc`ZYgg]cbY`Yf`6Y`hYf`i`i`b[`ž
Yfa`i`h][`YbXYf`5`ha`cgd`\`ÅfY`i`bX`gc[`Uf`A`i`g]_`ZØf`Y]b

i bj Yf[Ygg]WXYg'9f'YVb]gž'XUg'j]Y'Y'U'g'UVgc'i hYg'A i gg'jb
E i YYbgkck b'VYgWfY]VYb''9]b'k Y]hYfYf'[_cb]gWXYf'Gdch]gh'X]Y
? Uk UfUi !6fØW_Yž'k c'XYf'YfghY' _ca a Yfn]Y''Y'6i b[YY!Gdfi b[
%- , , 'ghUhhZUbX' '\]Yf'_ØbbYb'G]Y'gc[Uf']bg'K UggYf'Y]bhUi WXYbž
k Ybb'G]Y'a ØW'hYb''8]YgY'5_h]j]hÅhYb'V]YhYb'b]W'h'bi f
BYfj Yb_]hnY'ž'gcbXYfb'Ui W' i bj Yf['Y]W'WXY'5i gV']W_Y'Ui ZX]Y
i a 'Y[YbXYb'6Yf[Y'i bX': 'ØggYž'X]Y'XYb'5XfYbU'bgW' i V'bcW
j YfghÅf_Yb"

BYVYb'X]YgYb'<]['\][\hg'[]Vh'Yg'nU\ 'fY]WXY'k Y]hYfY
A Ø['W_X_Y]hYbž'X]Y'BUhi f'U_h]j 'ni 'Yf'YVYb''A ci bhU]bV]_]b['b'XYf
FY[]cb'i a 'E i YYbgkck bž'Yhk U'Ui Z'XYb'HfU]'g'XYg'A ccb'][\ h
HfUW_ž'ZØ\fh'Xi fW'gdY_hU_i 'ÅfY'6Yf['UbXgW'UZhYb'a]h'6']W'Ui Z
XYb'@U_Y'K U_Uh]di "' : Øf'Y]bY'gUbZhYfY'5_h]j]hÅh'V]YhYh'g]W'Y]bY
K UbXYfi b['ni 'XYb'6'i Y'Dcc'g'Ua ' <UUgh'DUgg'Ubž'k c'Y]b'_i fnYf
GdUn]Yf[Ub['ni 'hØf_]gZUFVYbYbž'['YhgWXYf[YgdY]ghYb'6YW_Yb
ZØ\fhž'X]Y'ni a 'J Yfk Y]'Yb'Y]b'UXYb''K Yf'X]Y'?ØghYb'Yf'_i bXYb
a ØW'hYž'_Ubb'Ub'D]\U'6YUW'gi fZYb''YfbYbž'k c'X]Y'gW'k UfnYb
GUbXghfÅbXY'i bX'ghUf'_Yb'K Y''Yb']XYU'Y'6YX]b[i b[Yb'V]YhYb"
8]YgY'J]Y'ZU'h'Ub'Ci hXccf!9f'YVb]ggYb'Yfa Ø['W'hYg'YXYa ž'X]Y
BUhi fk i bXYf'BYi gYY'UbXg'Ui Z'gY]bY'Y][YbY'K Y]gY'ni 'YbhXYW_Ybž
gY]Yg'Xi fW'fi \][Y'9f'_i bXi b[Yb'cXYf'UhYa VYfUi VYbXY
5VYbhYi Yf"

8]Y'A Ø['W_X_Y]hYbž'g]W']b'BYi gYY'UbXg'BUhi f'ni 'j Yfh]YZYbž'g]bX
bU\Yni '[fYbnYb'cgž'i bX'YXY'5_h]j]hÅh'Vf]b[h'G]Y'XYf'9ggYbn
X]YgYg'@UbXYg'Y]b'GhØW_'bÅ\Yf''C V'G]Y'X]Y'Gh]'Y'Y]bYg'GYg'VY]a
? U'U_ZU\ fYb' [Yb]Y»Ybž'X]Y'<YfUi gZcfXYfi b['Y]bYg'6Yf[dZUXg
UbbY\ a Yb'cXYf'XYb'A i h'ZØf'Y]bYb'Gdfi b[']bg'l b[Yk]ggY
Ui Zvf]b[Ybž'YXY'9fZU\fi b['\]bhYf'Åggh'Gdi fYbž'X]Y'k Y]h'ØVYf'X]Y
FY]gY'\]bUi gfY]WXYb"

B UW \ U'h][Yf'Hci f]ga i g



ghY`Yb`G]Y`g]W`j`cfz`G]Y`k`UbXYfb`Xi`fW`Y]bYb`i`fU`hYb`K`U`X`z`k`c`
YXYf`6Ui`a`Y]bY`;`YgW`jW`hY`Z`ØghYfh`c`XYf`V`]W`Yb`Ui`ZY]bYb`
:`cfXz`XYggYb`Gh`]Y`bi`f`j`ca`D`ÀhgW`Yfb`Y]bYg`K`UggYfZU`g`
Xi`fW`VfcW`Yb`k`]fX`B`Yi`gYY`UbXg`B`Uhi`f`]gh`Y]b`_cghVUfYg`9fVYž`
XUg`VY`i`hgUa`VY`UbXY`h`k`YfXYb`a`i`gg`8]Y`UhYa`VYfUi`VYbXYb`
@JbXgW`UZhYbž`X]Y`Å`f`W`A`]`cbYb`j`cb`6Ygi`W`Yfb`Ubn]Y`Ybž`
g]bX`ni`[`Y]W`Ya`dZ]bX`]W`i`bX`VYXfc`hž`k`Ybb`k`]f`b]W`h`UW`hgUa`
a`]h`]bYb`i`a`[`Y`Yb`8Yf`GW`i`m`X]YgYf`Y]bn][`Ufh][`Yb`l`a`k`Y`h`
YfZcfXYfh`Y]b`[`Ya`Y]bgUa`Yg`9b`[`U[`Ya`Ybh`j`cb`FY]gYbXYbž`
9]b`Y]a`]gW`Yb`i`bX`XYf`Hci`f]ga`i`g]bXi`ghf]Yž`i`a`g]W`Yfni`ghY`Ybž`
XUgg`ni`_ØbZh][`Y`;`YbYfUh]cbYb`X]YgY`VYb`K`i`bXYf`Yf`VYb`
_ØbbYb`J`cb`bUW`U`h][`Ya`FY]gYb`V]g`\\]b`ni`_cb`fYhYb`
A`U`bU`a`Yb`j`cf`C`fh`X]Y`J`YfUbhk`cfhi`b`[`]Y[`h]b`i`bgYfYb`
<`ÅbXYbž`X]YgY`GW`ÀmY`ni`VYk`U`fYb`"

8]Y`6YXYi`hi`b`[`XYg`l`a`k`Y`hgW`i`hYg`]b`B`Yi`gYY`UbX`k`]fX`Xi`fW`
X]Y`ja`a`YbgY`J`J]ZU`hXYf`^`_cgmghYa`Y`i`bhYfghf]W`Ybž`X]Y`j`cb`
YbXYa`]gW`Yb`5fhYb`k`]Y`XYa`?`k`]V]g`\\]b`ni`ZfU[`]Yb`
FY[`Ybk`À`XYfb`fY]W`h`8Yf`8YdUfha`YbhicZ`7cbgYfj`Uh]cb`fBC`7Ł`
gd]Y`h`Y]bY`nYbhfU`Y`F`c`Y`VY]`XYf`9f`U`hi`b`[`X]YgYf`B`Uhi`fgW`ÀmYž`
]bXYa`Yf`B`Uh]cb`U`d`Uf`_g`j`Yfk`U`h`Y`hi`bX`Dfc`[`fUa`a`Y`ni`f`
6Y`_`Àa`dZ`b`[`]b`j`Ug]`Yf`5fhYb`k`]Y`F`UhYb`i`bX`Dcggi`a`g`i`a`gYhnhž`
X]Y`Y]a`]gW`Y`:`cfU`i`bX`:`Ui`bU`VYXfc`Yb`8cW`XYf`ghY][`YbXY`

Hci f]ga i g'ghY`h'Y]bY'ni gÅhn`jWXY'<YfUi gZcfXYfi b['XUF" 'A]h
6Ygi WXYfnU\`Ybž'X]Y'j cf'XYf'DUbxYa]Y'ghYh]['gh]Y[Yb'i bX
5i g[UVYb'j cb'' -ž%'A]`]UfXYb'BN8`ja`'š\`f'V]g'A Åfn'&\$%,
YffY]W\hYbž'k ÅW\gh'XYf'8fi W`Ui Z'Ya dZ]bX`jWXY'; YV]YhY'k]Y'XYb
:]cfX`UbX!BUh]cbU`dUf`_cXYf'XYb'Hcb[Uf]fc!BUh]cbU`dUf`_"
, VYf`UghYhY'K UbXYfk Y[Yž'A Ø`'i bX'X]Y'6Y`Ughi b['Xi fW
7Ua dYfj Ubg'g]bX`bi f'Y]b][Y'XYf'DfcV`Ya Yž'X]Y'X]Y'l a k Y'h
[YZÅ\`fXYb"

I a 'X]YgYa 'HfYbX`Ybh[Y[Ybni k]f_Ybž`\Uh'XYf'Hci f]ga i gj YfVUbX
Hci f]ga 'šXi ghfm'5chYUfcU`fH=5Ł'X]Y' BYi gYY`ÅbX]gWXY
J YfdZ]W\hi b['ni`bUW\`U'h][Ya`Hci f]ga i g`fHG7Ł'jbg`@YVYb
[Yfi ZYbž'a]h'XYa`N]Y'ž'XUgg'V]g'&\$&) 'U`Y
Hci f]ga i gi bhYfbY\`a Yb`bUW\`U'h][Y`DfU`h]_Yb'j YfZc`[Yb"'K]Y`Ui Z
XYf'K YVg]hY'XYg'; cYh\`Y!`šgh]hi hg`VYgW\`f]YVYbž'i a ZUggh'X]YgY
š]h]Uh]j Y'j]Yf'?YfbVYfY]WXY'`K]fhgW\`UZhž'6Ygi WXYfž
; Ugh[Ya Y]bXY'i bX`l a k Y'h'`i bX`k]fX'j cb'ØVYf'%" \$\$
I bhYfbY\`a Yb'i bhYfghØhnh"'6Y]gd]Y`Y`ZØf`bUW\`U'h][Y`A U» bU\`a Yb
g]bX`X]Y'J Yfk YbXi b['dZUbn`j]WXYf'? UZZYVYWXYf'VY]'5]f'BYk
NYU`UbX`cXYf'XUg'J YfVch'j cb'9]bk Y[d`Ugh]_`VY]'8]gWčj Yf
K U]hca c`V]g'&\$&%"Gc`WXY`GW\`f]hY'nY][Ybž'k]Y'šbcj Uh]cb'i bX
J YfUbhk cfhi b[gVYk i gghY]b`< UbX`j b`< UbX`[Y\`Yb`_ØbbYbž'i a
XYb`Ø`c`c[]gWXYb`i : » UVXfi W`ni`a]b]a]YfYb"

5i Z'FY []Yfi b[gYVYbY'k YfXYb`YVYbZU`g'5bghfYb[i b[Yb
i bhYfbca a Ybž'XYb`Hci f]ga i g'a]h'XYa`l a k Y`hgW\`i hn`]b
9]b`_Ub['ni`Vf]b[Yb"'8Yf'Hci f]ga i ga]b]ghYf'Ghi Ufh'B Ug\`'\Uh'g]W
ZØf` \`cW\`k Yfh][Y`'6Ygi WXYf'Ui g[Ygd'fcW\`Ybž'X]Y'VYfY]h'g]bXž
a Y\`f'Ui gni [YVYb'i bX`k Yb][Yf'6Y`Ughi b['ZØf'X]Y'l a k Y'h'ni
j Yfi fgUWXYbž'a` ; Y[YbgUhn'ni`'6UW`dUW`Yfb'a]h'a]b]a U`Ya
6i X[Yhž'X]Y'cZi`_cghYb`cgY'7Ua d]b[d`ÅhnY`bi hnYb"'GhfYb[YfY
J c'fgW\`f]ZhYb`ZØf'7Ua dYfj Ubg'n]Y`Yb`XUfUi ZUVž'X]Y`BUh'f'ni
gW\`ØhnYbž'k Å\`fYbX`GhÅXhY'k]Y'E i YYbghck b`Ua V]h]cb]YfhY`N]Y`Y
j YfZc`[Ybž'V]g'&\$' \$'7C &!bYi hfU`ni`k YfXYb"J c'fgW\`Å[Y`k]Y`Y]bY
5VfY]gYghYi Yf'ZØf'Hci f]ghYbž'X]Y'XYb'7C &!5VXfi W`
VYfØW`g]W\`h][hž'nY][Yb`XYb`K]`Ybž'XYb`A UggYbhci f]ga i g'ni
fYXi n]YfYb'i bX'X]Y'6Y`Ughi b['ZØf'gYbg]V`Y'; YV]YhY'ni`j Yff]b[Yfb"

: Øf`F Y]gYbXY`VYXYi hYhj YfUbhk cfhi b[gj c`Yg`F Y]gYbž`VYk i gghY
9bhgWXY]Xi b[Yb`ni`hfYZZYbž`X]Y`X]Y`I a k Y`hgW\cbYb"8 Ug`Df]bn]d
@YUj Y`Bc`HfUW` gc`hY`ni`f; fi bX`U[Y`YXYf`F Y]gY`k YfXYb``A Ø`
a]hbY\ a Ybž`Ui Z`Ui g[Yk]YgYbYb`K Y[Yb`V`Y]VYb`i bX`k]`XY`H]YfY
b]W\h`ghØfYb`g]bX`Y]bZUWYž`UVYf`k]f`_i b[gj c`Y`A U» bU\ a Yb"8 Y
K U\`bUW\`U`h][Yf`I bhYf_ØbZ`hY`i bX`Hci fUbV]YhYfž`X]Y`g]W\`XYf
HG7`j YfdZ]W\hYh`\UVYbž`i bhYfghØhnh`ni XYa``c`_U`Y`6Ya Ø\i b[Yb
i a`XYb`BUhi fgW\i hn`K Yf`]b`BUh]cbU`dUf`_g`k]Y`5VY`HUga Ub
cXYf`:]cfX`UbX`i bhYfk Y[g`]ghž`gc`hY`g]W\`ØVYf
6Ygi W\YfVYgW\ fÅb`_i b[Yb`i bX`6i W\i b[ggmg`hYa Y`]bZcfa]YfYbž
X]Y`, VYf`Ughi b[`j Yf\]bXYfb`gc`Yb"5i W\`_Y]bY; YghYbž`k]Y`X]Y
J Yfa Y]Xi b[`j cb`9]bk Y[d`Ugh]_`cXYf`X]Y`Bi hni b[`ÖZZYbh]W\Yf
J Yf`_Y\fga]hhY`ž`hfU[Yb`XUni`VY]ž`XYb`Ö`c`c[]gW\Yb`:]i » UVXfi W_
ni`fYXi n]YfYb"

8]Y`J YfV]bXi b[`ni`f`BUhi fž`X]Y`]b`XYf`A`Ýcf]!`?i`hi`f`gc`h]YZ
j Yfk i fnY`h`]ghž`_Ubb`U`g`_`gd]fUh]cb`X]YbYb"i`Àf`?cbnYdh`XYg
?U]h]U`_]hUb[U``XYf`<ØhYfgW\UZh`ØVYf`XUg`@UbX``Yf]bbYfh`XUfUbž
XUgg`k]f`b]W\h`bi`f`6Ygi W\Yfž`gcbXYfb`Ui W\`6YgW\ØhnYf`X]YgYf
@UbXgW\UZhYb`g]bX"i`_`h]Uh]j Yb`k]Y`ZfY]k]`][Y`5fVY]h`]b
BUhi fgW\i hndfc`Y`_hYb`cXYf`XUg`DZUb`nYb`j cb`6Åi a Yb`V]YhYb
F Y]gYbXYb`X]Y`A`Ö[`]W\`_Y]hž`U`_h]j`ni`a`9f`U`h`VY]ni`hfU[Yb"i`>XYf
GW\f]h`i]b`F`]W\hi b[`BUW\`U`h][`_Y]hž`gY]`Yf`bcW\`gc`_`Y]bž`\`]Zž`X]Y
i bVYfØ`fhYb`K`À`XYfž`_`UfYb`GYb`i bX`a`U`Ygh`h]gW\Yb`6Yf[Y
BYi gYY`UbXg`ZØf`X]Y`Ni`_i bZ`h`ni`g]W\Yfb"

F Y]gYd`Ubi b[`i bX`H]ddg



HfAi a Yb'G]Y'j cb'Y]bYf'FY]gYž'k c'YXYf'5i [YbV']W'j cb'XYf'A U[]Y
i bVYfØ\fhYf'@UbXgWUZhYb'Xi fW Xfi b[Yb']gh3'BYi gYY'UbX'fi Zh
a]h'gY]bYb'B Uhi fk i bXYfbž'XcW'VYj cf'G]Y' ÆfY' ? cZZf'dUW_Ybž
'c\bh'Yg'g]Wž'X]Y'dfU_h]gWYb'8YhU]'g'ni '_YbbYbž'i a 'XUg'6YghY
Ui g' ÆfYa '5VYbhYi Yf'\YfUi gni \c'Yb''J cb'XYf'5bfY]gY'ØVYf'X]Y
]XYU'Y'FY]gYnY]h'V]g'\]b'ni 'dUggYbXYb'l bhYf_ØbZhYb']b'XYf'BA\Y
XYf'VYY]bXfi W_YbXghYb'C fhY' 'Y]bY' [i hY'D'Ubi b['ØZbYh'X]Y'HØf
ni 'i bj Yf[Ygg]'WYb'9f'YVb]ggYb''@UggYb'G]Y'g]W'Ui ZY]bY'FY]gY
Y]bž'VY]XYf'G]Y'X]Y'GW'Øb\Y]h'XYf': ěfXYž'J i '_UbY'i bX'GhfÅbXY
\Ui hbU\Yf'YVYbž'k Å\fybX'G]Y'g]W'Ui ZX]Y''c[]gh]gWYb
: Y]b\Y]hYb'ghØhnYb'_ØbbYbž'X]Y' ÆfYb'5i ZYbh\U'h'fY]Vi b[g'cg
[YghU'hYb''

8]Y'5bfY]gY'bUW'BYi gYY'UbX'VY[]bbh'ZØf'X]Y'a Y]ghYb
]bhYfbUh]cbU'Yb'6Ygi WXYf'a]h'Y]bYa ' : 'i ['ni 'Y]bYa 'XYf'[fc»Yb
8fY_fYi nY'k]Y'5i W_UbXž'7\ f]ghW'i fW'cXYf'K Y'']b[hcb''
5i W_UbX'5]fdcfh'f5? @Ł]gh'XYf'<Ui dhUb_i bZhgd i b'h'ZØf'j]Y'Y
FY]gYbXY'Ui g'9i fcdUž'5g]Yb'i bX'BcfXUa Yf]_Už'a]h
8]fY_hj YfV]bXi b[Yb'cXYf'Nk]gWYbghcddg]b'GhÅXhYb'k]Y'8i VU]ž
G]b[Udi f'cXYf'GmXbYm''J cb'8Yi hgW'UbX'Ui g'XUi Yfh'X]Y'FY]gY']b
XYf'FY[Y''&('V]g'' \$'Ghi bXYbž'UV\Åb[] ['j cb'XYf': 'i [fci hY'i bX
XYb'l a gh]Y[Yb''7\ f]ghW'i fW'f7 < 7Ł'Ui ZXYf'GØX]bgY'']gh'Y]bY
k Y]hYfY'C dh]cbž'VYgcbXYfg'k Ybb'G]Y'X]fY_h'ni 'XYb'Gci h\Yfb'5'dg

cXYf'XYa ' :]cfX`UbX'a ÒW`hYb" `B UW`XYf'5b_i bZh`V]YhYb
`b`UbXgZØ[Yž`A]Yhk U[Yb`cXYf': YfbVi ggY`k]Y``b`hYf7]hm`Y]bY
ZYI]V`Y`A Ò[`]W`_Y]hž`X]Y`B Uhi fk i bXYf`ni `YffY]W`Yb" : Øf
UV[Y`Y[YbY`C fhY`k]Y`XYb`A]ZcfX`Gci bX`Ya dZ]Y`h`g]W`Y]b
A]Yhk U[Yb`cXYf`Y]bY [YZØ`fhY`Hci f`UV`E i YYbghcck b`cXYf`HY
5bUi ž`XU`ÒZYbh]W`Y`J Yf`_Y`fga]hhY`VY[fYbnh`g]bX"

8]Y`K U`X`XYf`VYghYb`FY]gYnY]h`Àb[hj`cb``ÀfYb``b`hYfYggYb`i bX
XYb`FY[]cbYb`UVž`X]Y`G]Y`Yf`_i bXYb`a ÒW`hYb" `BYi gYY`UbXg
`U`fYgnY]hYb`j Yf`Ui ZYb`Ybh[Y[Yb[YgYhnhini `XYbYb`]b
8Yi hgW`UbX. `8Yf`Gca a Yf`fBYnYa VYf`V]g': YVfi UfL`Vf]b[h`k Ufa Y
HYa dYfUhi fYb`j cb`Xi fW`gW`b]hh]W`&(..7ž`XYU`ZØf`6UXYi f`Ui V
Ub`Ghf`ÀbXYb`k]Y`D]\U`cXYf`K UbXYfi b[Yb`ja `5VY`HUga Ub
BUh]cbU`dUf`" `8Yf`K]bhYf`f`b`]V]g`5i [i ghL`a]h`< ÒW`ghk YfhYb`i a
%) ..7`i bX`_Ø`Yb`B`ÀW`hYb`Y][bYh`g]W`dYfZY`h`ZØf`G`_ZU`fYb`]b
XYb`Gci h`Yfb`5`dgž`k `À`fYbX`XYf': fØ`]b[`fGYdhYa VYf`V]g
Bcj Ya VYfL`i bX`< YfVgh`fA `Àfn`V]g`A U]L`a]h`a]`XYfYb
HYa dYfUhi fYb`i bX`k Yb][Yf`Hci f]ghYb`cdh]a U`Y`6YX]b[i b[Yb`ZØf
K UbXYfi b[Yb`i bX`C i hXccf!5_hj]]h`ÀhYb`V]YhYb" `6YUW`hYb`G]Y
`YXcW`ž`XUgg`XUg`K YhhYf`i bj cf`YfgY`VUf`gY]b`_Ubb` `FY[Yb`]gh
`YXYfnY]h`a Ò[`]W`ž`VYgcbXYfg`Ub`XYf`K Ygh`ØghY" `9]bY`XYHU]`YfhY
`VYfg]W`hini `XYb`_]a Uh]gW`Yb`6YX]b[i b[Yb`i bX`9a dZY`i b[Yb
Z]bXYb`G]Y`Ui ZI f`Ui Vg[i fi ž`k c`X]Y`VYghYb`NY]hYb`ZØf
gdYn]Z]gW`Y`5_hj]]h`ÀhYb`Ui gZØ`f`]W`VYgW`f]YVYb`k YfXYb"

I bhYf_ØbZhY`]b`XYf`B`À`Y`XYf`BUhi fk i bXYf`j Uf]]YfYb`Y`bUW
FY[]cb`i bX`6i X[Yhž`V]YhYb`YXcW`ZØf`YXYb`; YgW`a UW`Yhk Ug
DUggYbXYg" `b`XYf`B`À`Y`XYg`A]ZcfX`Gci bX`]gh`HY`5bUi `XYf`]XYU`Y
5i g[Ub[gdi b_hž`Yhk U`%&\$`?]`ca YhYf`YbhZYfbhž`a]h`C dh]cbYb`k]Y
XYa `HY`5bUi `@_Yj]Yk `A chY`/`<c`]XUm`DUf`_ZØf`dFY]gVYk i gghY
FY]gYbXY`cXYf`XYa `i i f]ØgYb` :]cfX`UbX`@cX[Y`ZØf`[Y`cVYbY
5bgdfØW`Y" : Øf`XYb`Hcb[Uf]fc!BUh]cbU`dUf`_V]YhYh`g]W`HUi dc`U`g
6Ug]g`Ubž`a]h`i bhYf_ØbZhYb`k]Y`XYa `<U`U`@cX[Y`ZØf`6UW`dUW`Yf
cXYf`XYa `<]`hcb`@_Y`HUi dc`ZØf`a Y`f`?ca Zcfh`E i YYbghcck bž
bU`Y`XYb`Gci h`Yfb`5`dg`i bX`XYa `@_Y`K U`Uh]di ž`]gh`Y]b`<chgdch
ZØf`5VYbhYi Yf`i gh][Y`i bX`V]YhYh`U`Yg`j cb`<cghY`g`k]Y`XYa `Mk 5
E i YYbghcck b`V]g`]b`ni `YI`_`i g]j Yb`FYgcfhg`k]Y`XYa `GcZ]hY`
E i YYbghcck b" `b`XYf`B`À`Y`XYg`5VY`HUga Ub`BUh]cbU`dUf`_g`Z]bXYb

g]W\`]b`A`chi`Y`_U`cXYf`?`U]hYf]hYf]`[`Ya`Øh]W\Y`:`Yf]Yb\`Ài`gYf`i`bX`
7Ua`d]b[`d`ÀhnY`k`j]Y`XYf`?`U]hYf]hYf]`F`YWfYUh]cb`F`YgYfj`Yž`jXYU`ZØf`
BUhi`f`]YV\`UVYf``9]bY`ZfØ\`nY]h][`Y`6i`W\i`b[`ž`VYgcbXYfg]b`XYf`
<Ui`dhgU]gcb`j`cb`8YnYa`VYf`V]g`:`YVfi`Ufž`]gh`fUhgUa`ž`XU`VY`Y]VhY`
l`bhYf`_ØbZhY`gW\`bY``Ui`g[`YVi`W\`hg]bX"

9]b][`Y`dfU`_h]gW\`Y`H]ddg`_ØbbYb`ÆfY`F`Y]gY`bcW\`Ub[`YbY\`a`Yf`
[`YghU`hYb``B`Yi`gYY`UbXg`?`]a`U`]gh`k`YW\`gY`\`UZh`gY`Vgh]a`
Gca`a`Yfž`XU\`Yf`gc``hYb`G]Y`?`Y]Xi`b[`]b`GW\`]W\`hYb`i`bX`
F`Y[`YbgW\`i`hn`a`]hVf]b[`Ybž`VYgcbXYfg`ZØf`K`UbXYfi`b[`Yb`c`XYf`
5i`gZØ[`Y`]b`F`Y[`]cbYb`k`j]Y`:`]cfX`UbX``9]b`A`j]Yhk`U[`Yb`V]YhYh`X]Y`
[`fØ»`hY`:`Yi`jV]`hÀhž`i`a`UV[`Y`Y[`YbY`BUhi`fk`i`bXYf`ni`YffY]W\`Ybž`
UVYf`VYUW\`hYb`G]Yž`XUgg`X]Y`GhfU»`Yb`c`Zh`_i`fj`Yb`fY]W\`i`bX`Yb[`
g]bX`Y`Y]bY`[`i`hY`D`Ubi`b[`]XYf`:`U\`fnY]hYb`]gh`YggYbn]Y``":`Øf`
`Àb[`YfY`5i`ZYbh\`U`hY`c\`bh`g]W\`X]Y`Bi`hni`b[`]j`cb`7Ua`dYfj`Ubgž`X]Y`
YXcW\`ghfYb[`Yb`J`cf`gW\`f]ZhYb`i`bhYf`]Y[`Ybž`i`a`X]Y`I`a`k`Y`h`ni`
gW\`ØhnYb``Ni`XYa`gc``hYb`G]Y`g]W\`ØVYf`c`_U`Y`:`Y]YfhU[`Y`k`j]Y`
K`U]hUb[`]8Umif`":`YVfi`Ufž`c`XYf`A`UhUf]_]fł`b]#`j`]ł]bZcfa`j]YfYbž`XU`
X]YgY`J`YfUbgH`hi`b[`Yb`c`XYf`GW\`Y»i`b[`Yb`VYY]bZi`ggYb`_ØbbYb`
8]Y`Gca`a`YfnY]h`fBUm][`\`h`GUj`j]b[`ł`j`cb`9bXY`GYdhYa`VYf`V]g`
5bZub[`]5df`]j`Yf`Àb[`Yfh`X]Y`HU[`Yg`]W\`hghi`bXYbž`k`Ug`ZØf`C`i`hXccf!`
5_h]j`]hÀhYb`j`cb`J`cfhY`]`]gh"

8]Y`J`j]Y`ZU`h`XYf`i`bhYf`_ØbZhY`i`bX`F`Y]gY`cdh]cbYb`Yfa`Ø[`]W\`h`Y`gž`
ÆfYb`5i`ZYbh\`U`h]bX]j`]Xi`Y``ni`i`[`YghU`hYbž`gY]`Yg`a`]h`Y]bYa`i`c`_i`g`
Ui`Z`5VYb`hYi`Yf`c`XYf`9b`hgdUbbi`b[`]C`V`G]Y`]b`Y]bYa`i`[`Ya`Øh]W\`Yb`
A`chY`b`U\`Y`XYa`i`@`U`_`Y`HY`_Udc`ØVYfbUW\`hYb`c`XYf`Y]b`NY`h`i`bhYf`
XYb`GhYfbYb]a`5VY`HUGa`Ub`BUh]cbU`dUf`_`Ui`ZgW\`U[`Ybž`X]Y`
B`À`Y`ni`B`Yi`gYY`UbXg`BUhi`fk`i`bXYfb`k`]fX`ÆfY`F`Y]gY`dfÀ[`Yb``A`]h`
XYf`f]W\`h][`Yb`J`cf`VYfY]hi`b[`]ØbbYb`G]Y`g]W\`[`Ubn`Ui`Z`X]Y`
9f`_i`bXi`b[`]X]YgYf`UhYa`VYfUi`VYbXYb`@`UbXgW\`UZhYb`
_cbnYbhf]YfYb`i`bX`X]Y`A`U[`]Y`XYg`@`UbXYg`]b`j`c``Yb`NØ[`Yb`
[`Yb]Y»`Yb"

E i Y``Yb

- \ hhd g. ##h\ Yd`UbYhgk cf`X"Wca #) & , !hcd!%' !bUhi fU`!
k cbXYfg!hc!gYY!]b!bYk !nYU`UbX
- \ hhd g. ##k k k "ghi X]YbfY]gYb"XY#ghUXhXYhU`g#ei YYbgh
ck b!bYi gYY`UbX
- \ hhd g. ##XY"k]_]dYX]U"cf[#k]_]#]cfX`UbX!
BUh]cbU`dUf_
- \ hhd g. ##k k k "W`YVf]hmWfi]gYg"Wca #V`c[#bYk !
nYU`UbX!Z`cfXg
- \ hhd g. ##ghi XmZ`I "XY#YfX_i bXY# i ` _UbY!]b!
XYi hgW`UbX!, ' \$%
- \ hhd g. ##k k k "fchcfi Ubn"Wca #]g]h
- \ hhd g. ##Yb"k]_]dYX]U"cf[#k]_]#Gci h\YfbS5`dg
- \ hhd g. ##U`dga ci bhU]bYYf]b[[YbXUVU"V`c[gdch"Wca #
&\$%* # \$' #bYk !nYU`UbX!gci h\Yfb!U`dg!
a ci bhU]bYYf]b["\ ha `
- \ hhd g. ##k k k "k Y`hk i bXYfYf"XY#%- !gWcYbghY!
k UggYfZUY`Y!]b!bYi gYY`UbX#
- \ hhd g. ##XY"a "k]_]dYX]U"cf[#k]_]#@]ghYsXYfSK UggYfZ
i 7' i 5(`YS]bSBYi gYY`UbX
- \ hhd g. ##XY"a "k]_]dYX]U"cf[#k]_]#9bXYa]h
- \ hhd g. ##k k k "ghi Xmga UfhYf"XY#ghi X]i a #V]c`c[]Y!ghi
X]i a #V]cX]j Yfg]hUYh!ghi X]i a #YbXYa]gWY!UfhYb#
- \ hhd g. ##XY"k]_]dYX]U"cf[#k]_]#Gi Vhfcd]gWYfSF Y[Yb
k U`X
- \ hhd g. ##k k k "gdY_hfi a "XY#YI]_cb#V]c`c[]Y#gi Vhfcd]
gWYf!fY[Ybk U`X#* () - ,
- \ hhd g. ##a mei YYbghck bX]Ufm"Wca #d]\U!VYUW!bYk !
nYU`UbX#
- \ hhd g. ##k k k "hf]dUXj]gcf"Wca #5hhfUWh]cbSF Yj]Yk ![%
,) &&, %!X%%(, &\$' !FYj]Yk g!D]\US6YUW!
D]\USBcfh\ S=g`UbX"\ ha `
- \ hhd g. ##Yb"a "k]_]dYX]U"cf[#k]_]#A i 7(i , %cf]SW`hi
fY
- \ hhd g. ##dgmWc`c[]Y!XYg!
[`i YW_g"XY#YI]_cb#bUhi fj YfVi bXYb\Y]h#
- \ hhd g. ##fcj Y"a Y#XY#nc #bYk !nYU`UbX#_UmU_]b[
- \ hhd g. ##k k k "Vi b[m"Wc"bn#ei YYbghck b#bYj]g#bYj]g!
Vi b[m#

- \ hhd g. ##k k k "[cYh\Y"XY#]bg#b n#XY#_i `#_i U#ghf#&%+ &(')) "\ ha `
- \ hhd g. ##k k k "XYi hgW\`UbXZi b__i `hi f"XY#bYi Yf! hci f]ga i g!]b!bYi gYY`UbX!%\$\$"\ ha `
- \ hhd g. ##k k k "i f`Ui Vg[i fi "XY#fY]gY_U`YbXYf#VYghY! fY]gYnY]h!bYi gYY`UbX#
- \ hhd g. ##k k k "hci f`YUXYf"bn#bYi gYY`UbX!fY]gY! d`UbYb#bYi gYY`UbX!VYghY!fY]gYnY]h

8YhU]`g

6Ygi W\Yb`G]Y`i bg`Ui Z.`Y]bY!fY]gY"XY