

K U`Y`gW`cggYb`XUg`6H7!B Yhnk Yf_]a
>J\ f`&%\$\$` `9a dZc\`YbY

5a`&%"GYdhYa VYf`j Yf0ZZYbh]W`hY`XYf`Y\Ya U`][Y`6]hWc]b!
9bhk]W`Yf`; Uj]b`5bXFYgYb`Y]bYb`]bhYfYggUbhYb`6`c[VY]hfU[
ØVYf`Y]b`a Ø[`]W`Yg`Ö]hWc]bQNi`_i bZh`/ Ua d/, &&\$`/8Yf
6`c[VY]hfU[`VYgW`fY]Vh`Y]bY`h\YcfYh]gW`Y`G]hi Uh]cb`ZØf`XUg
6]hWc]b!B Yhnk Yf_]a`>J\ f`&\$`%ž]b`XYf`X]Y`a`Y]ghYb`Ø]hWc]bQ
HfUbG`U_h]cbYb`Z]bXYb`b]W`h`Ui`Z`XYa`"ghU`h`Ö]hWc]bQ
B Yhnk Yf_"`9]b`h\YcfYh]gW`Yf`6`]W`Ui`Z`*`A`]`]cbYb`8`c`Uf`d`fc
6]hWc]b`i`bX`XUg`>J\ f`&\$`%`B`UW`X`Y`a`5`i`ggh]Y[`]cb`GUhc`g\]
B`U`_`U`a`c`hc`j`cb`6]hWc]b`]a`>J\ f`&\$`%`\$`ZØf`Y]b][Y`>J\ f`Y`; Uj]b
5bXFYgYb`k`i`f`X`Y`U`g`Y]hYb`X`Y`f`6`Y`hf`Y`i`Y`f`X`Y`f`G`c`Z`h`k`U`f`Y
U`b[Y`g`Y`Y`b`ž`b`U`W`X`Y`a`B`U`_`U`a`c`hc`]`a`X`Y`G`W`X`Ø`gg`Y`
\]b`h`Y`f`U`gg`Y`b`\`U`h`h`" `a`>J\ f`&\$`%`V`Y`\`U`i`d`h`Y`h`U`i`W`6]hWc]b!
9bhk]W`Yf`A]_Y`<YUfbž`XUgg`Yf`Y]bY`9!A`U]`Yf`U`h`Y`b`j`cb
/ Ua`d`^`Y``]d/

5a`&%"GYdhYa VYf`j YfÒZZYbh`j]W\hY`XYf`Y\Ya U`][Y`6]hWc]b!
9bhk]W`Yf`; Uj]b`5bXfYgYb`Y]bYb`]bhYfYggUbhYb
6`c[VY]hfU[`ØVYf` Y]b`a Ò[`]W\Yg `Ö]hWc]bQNi`_i bZh" `8Yf
6`c[VY]hfU[`VYgW\fy]Vh`Y]bY`h\YcfYh]gW\Y`G]hi Uh]cb`ZØf
XUg`6]hWc]b!BYhnk Yf`_]a`>U\f`&\$*%ž`]b`XYf`X]Y`a Y]ghYb
Ø]hWc]bQHfUbgU_h]cbYb`Z]bXYb`b]W\h`Ui Z`XYa`"ghUhh
Ö]hWc]bQBYhnk Yf`_"

9]b`h\YcfYh]gW\Yf`6`]W`Ui Z`*`A`]`]cbYb
8c``Uf`dfc`6]hWc]b`i`bX`XUg`>U\f`&\$*%

BUW`XYa`5i ggh]Y[`j cb`GUhcg\]BU_Ua`chc`j`cb`6]hWc]b`]a`>U\f
&\$%\$`ZØf`Y]b][Y`>U\fy`; Uj]b`5bXfYgYb`k`i`fXY`U`g``Y]hYbXYf
6YhfYi Yf`XYf`GcZhk UfY`Ub[YgY\Ybž`bUW\XYa`BU_Ua`chc`]a`X]Y
GW\`ØggY``]bhYf`UggYb`UhhY" `a`>U\f`&\$%%`VY`Ui`dhY`h`Ui`W
6]hWc]b!9bhk]W`Yf`A`_Y`<`YUfbž`XUgg`Yf`Y]bY`9!A`U]`Yf`U`hYb
j`cb`GUhcg\]ž`XYf`gU[hYž`XUgg`XYf`6`c`W`W`U]b!9fZ]bXYf`ni`UbXYfYb
8]b[Yb`ØVYf[Y[Ub[Yb`]gh`ž`UVYf`Ui`W`]\]bni [YZØ[h`\Uh`6Y]
; Uj]b`i`bX`U`Yb`]gh`Yg`]b`[i`hYb`<`ÅbXYb" `5bXfYgYb`]gh`YXcW
b]W\h`a`Y\f`XYf`<`Ui`dhj`Yfk`U`hYf`i`bX`gY]h`>U\fyb`_Y]b`U_hj]`Yf
6]hWc]b`7cfY!9bhk]W`Yf"

NYbg]Yfh`Ui Z`FYXX]hf`#]hWc]b`f[`Ui`VY`]W\ž`UVYf`j`]Y``Y]W\h
gi`W\Y`]W`Y]bZUW`b]W\h`Ub`XYf`f]W\h][Yb`GhY``YŁ

; Uj]b`5bXfYgYb`f4 [Uj]bUbXfYgYbŁ`&&"\$-`&\$&%

⊕`XYf`J`Yf[Ub[Yb`Y]hž`6]hWc]b`Wc`a`BYk`g`VYXYW`h`5bXfYgYbg
A`Y]bi`b[`ni`a`HcfbUXc!A`|]b[!Dfchc`c``j`cb`9h\YfYi`a`i`bX`ni`a
K`U``Yh!8UhYbgW\i`hn]a`5``[Ya`Y]bYb"5bXfYgYb`Ui`W`X]g`_i`h]Yfh
XUg`6]hWc]b!6Uf[Y`X`f`67`<`Ł!BYhnk Yf`_]a`>Ubi`Uf`&\$%,`]b`Y]bYa
j`cb`]a`j`YfZUgghYb`J`cfgW`U[`a`h`XYa`H]hY``GdY]W\Yfb`XYg
I`HL`C`U`g`6]h!J`Y`_hcf`"⊕`Øb[YfYf`NY]hž`bUW\XYa`HcfbUXc!A`|]b[!

6`c [!Dcghž`hY`5bXfYgYb`gY]bY`A Y]bi b [`]b`Y]bYa `6`c [!Dcgh`a]h
XYa `H]hY`.: 9g [Y`h`fbcW 3Ł`b]W h`i a `X]Y`HYW b]_ `8UbbžUa
&%"GYdhYa VYf`&\$&%ž`U h`5bXfYgYb`bcW`Y]ba U`Yhk Ug`ni a
6]hWc]b`ni`gU [Yb`f6H7Ł`BYhmk Yf`_"

8Yf`Y\Ya U][Y`6]hWc]b!7cfY!9bhk]W`Yf`gU [hYžXUgg`X]Y`@Yi hY
X]Yg` U`g`Y]b`_Y]bYg`GhØW`GW]YbW!:]Wh]cb`VYhfUW hYb`gc`hYbž
ZØ [hY`YXcW` \]bni ž` j cb`U`Yb`a Ø [`]W Yb`Ni`_ØbžhYb`XYb`_Y`]W ž
XUgg`X]Yg`Y]bY`YVYbgc` [i hY`7\UbW` \Uh"

GhY`Yb`G]Y`g]W`j cf.`K]f`gW fY]VYb`XUg`đ\ f`&\$*% ž`gW fY]Vh
5bXfYgYb`]b`gY]bYf`bYi YghYb`6`c [Y]bhfU ["` 8]Y`6H7`8Yf`DfY]g
VYhfÅ [h`gYW g`A]`]cbYb`i G!8c`Uf` `XUg`Ybhgd]W h`Yhk U`Y]bYf
A]`]cb`&\$&%!8c`Uf`Ui Z [fi bX`XYf`đZUh]cb`"A]bYf`k YfXYb`VY`c\bh
\$ž\$*\$%\$`) %) * &) `6H7`dfc`6`cW`ž`nn [``HfUbgU_h]cbg [YVØ\fyb`j cb
W]"`): `6H7`ZØf`Yhk U` ("\$\$\$`HfUbgU_h]cbYb`f+`) \$\$`i G8`dfc
HfUbgU_h]cbŁ`5VYf`Ua`a Y]ghYb`6H7`HfUbgU_h]cbYb`Z]bXYb`b]W h
Ui ZXYa` ``ghUhh`6H7`BYhmk Yf`_`8]Y`a Y]ghYb`6H7`]gh]b
A i`h]g][bUhi f!5i g [UVYb`Y]b [YgW`cggYbž`X]Y`Xi fW`A i`h]dUfhmł
6YfYW bi b [Yb [Yg]W Yfhi bX`U`g` j YfdUW`hY`Hc`_Yb`Ui ZY]bYf
UbXYfYb`?YhhY` [Ygd]Y [Y`h`k YfXYb` ž`ZØ [h`5bXfYgYb` \]bni "`8Yf
6`c [VY]hfU [`VYhcb`h`k Y]hYf.

8]Y`@Yi hY` \UVYb`] \fy`6H7`Yb`hk YXYf`k Y]`g]Y`gW`bY`YfY
HfUbgU_h]cbYbž`b]YXf][YfY` ; YVØ\fybž`a Y\ f`Df]j Uhgd\Åfy
k ØbgW Yb`cXYf` \f` ; Y`X`]bj Ygh]YfYb`a ØW hYb`6H7`]b
XYnYbhfU`Yb` :]bUbngUW Yb`"CXYf`j]Y`Y]W h`U`Y`cVYb
 [YbUbbhYb`"8]Y`HfUbgU_h]cbYbž`X]Y`Ui ZXYf`<Ui dhYVYbY
ghUhhZ]bXYb`6H7`BYhmk Yf`_]g]bX`j cb` \c\Ya`K Yfž
\Ui dhgÅW`]W`nk]gW Yb`đ\UVYfb`j cb`Gi dYfk U` [fØ»Y
fhYbhfU`]g]YfhY`6ØfgYbž`NYbhfU`VUb`_Yb`i bX`X]Y
XYnYbhfU`Yb`A Y\ fdUfhY]Yb!6YfYW bi b [gUXfYggYbž`X]Y`U`Y
j YfdUW`hYb`A ØbnYb`Yb`h`U`hYbŁ`"

...

5bXfYgYb. ' 8]Y'A Ò[`]W_X]hž'XUgg'6]hWc]b'ja
6]hWc]b!BYhnk Yf_'n]f_'i `]Yfh

5bXfYgYbg'H\Ycf]Y'_Öbbh'gY\`f'[i h'dUgg]YfYb'i bX'XYfnY]h[]Vh'Yg
j]Y'Y'j YfdUW_hY'cXYf'gmbh\Yh]gW_X'6]hWc]bg'f'6H7'U'Z'UbXYfYb
6'cW_WU]bg'j Yfk YbXYh'k]fX''8i bY'5bU'mh]Wg'nY][h'X]Y'5bnU\`XYf
6H7'ØVYf'9h\YfYi a '[Y\YVY'h']gh'&* - "*" (&'6H7']b'g]YVYb
j YfgW_X]YXYbYb'Dfc'Y_hYb''8Ug'K fUddYX'6]hWc]b'fK 6H7'U'Dfc'Y_h
j YfZØ[h'ni a 'NY]hdi b_h'XYg'GW_X]fY]VYbg'ØVYf']bg[YgUa h'&\$) "- &%
X]YgYf'7c]bg''5bXfYgYb'gYhnh'gY]bYb'h\YcfYh]gW_X]b'6Y]hfU['Zc'fhž
]bXYa 'Yf'gU[hž'XUgg'X]Y'Gi dYfk U'Y'XUg'BYhnk Yf_'ZØf']a a Yf
VY\YffgW_X]b"

8]YgY'K U'Y'\U'hYb'X]Y'6H7'BYhnk Yf_'ZØf']a a Yf ž'gW_X]fY]Vh
5bXfYgYb'' G]Y'g]bX'X]Y'A]bYf'i bX'X]Y'9fghY''Yf'j cb
HfUbgU_h]cbYb/'9g']gh']\bYb'Y[U'ž'k]Y'\cW_X]Y
HfUbgU_h]cbg[YVØ\YfYb'g]bXž'k Y]'g]Y'gc'j]Y'Y'; YVØ\YfYb'Yf\U'hYbž
k]Y'g]Y'VYnU\`Yb''æ 'š\`f'&%\$\$'VYa Yf_Yb'X]Y'K U'Yž'XUgg'X]Y
6Y'c\bi b['ZØf'XYb'A]b]b['ja ' ; fi bXY'Bi '']gh'i bX'Yg']a a Yf
k Yb][Yf'HfUbgU_h]cbYb'Ui Z'XYf''Ub[gUa Ybž'hYi fYb'Bi ''!
Df]j Uhg'd\ÄfY '[]Vh'6H7'BYhnk Yf_' '5'gc'VYgW_X]Y»Yb'g]Yž'Yg'ni
j YfY]bZUW_X]b'i bX'; Y'X'ni 'gdUfYbž']bXYa 'g]Y'Yg'\Yfi bhYfZU\YfYb ž
ZØ[h'XYf'Y\Ya U][Y'6]hWc]b!9b'hk]W_Yf'\]bni ''5bXfYgYbg'6'c[dcgh
[Y'h'k Y]hYf.

9]bYf'bUW_X]Ya 'UbXYfYb'gW_X]Y»Yb'g]Y'X]Y' 6fØW_Yb ž'X]Y
g]W_X]VYk Y[Yb'6H7'nk]gW_X]b'?YhhYb''8Ubb'j YfVfYbbYb
g]Y'U''Y'6H7'[YgdYffh'Ui Z'XYa '6H7'?YhhYž']bXYa 'G]Y'Yg
Ub'X]Y'\$I \$\$\$!5XfYggY'gYbXYbž'i a 'g]W_X]fni ghY''Ybž'XUgg
b]Ya Ub'X'Yg'Ya U'g'ZØf'X]Y'6H7'BYhnk Yf_' 'f[YbXk Ubb
[]Vh'Yg'bi ''bYi Y'6H7'dfcXi n]Yfh'Ui Z'XYa '6H7'BYhnk Yf_
i bX'bi ''6H7'n]f_'i `]YfYb'Ui Z'XYf'6H7'BYhnk Yf_' '9g[]Vh
b]W_X]hg'a Y\`f'ni 'g]W_X]fb'i bX'X]Y'?YhhY'ghc'ddh"

G]bX'G]XYW_X]U]bg'?cb_i ffYb'hYb'cXYf'k YfXYb

g]Y`6]hWc]b` \ Y`ZYbž`ni`g_U`]YfYb3

5bXfYgYb`_ca a h`ni`XYa`GW`i ggž`XUgg`Yhk U` &\$`A]``cbYb`6H7
`k]fX`]b`UbXYfYb`6`cW_WU]b!BYhmk Yf_Yb`n]f_i`_]YfYb" K Yfhj c``ž
k Y`]Yg`bi f`Y]bY`VY[fYbnhY`5bnU`\`XUj cb`[]Vh`i bX`k Y`]6H7`k Uf
XUg`YfghY`_bUddY`X][]hU`Y`5ggYh ž`gW`i ggZc`[Yfh`5bXfYgYb`Ua
9bXY`gY]bYg`6`c[VY]hfU[g" `hYfYggUbhYfk Y]gY`k]fX`XUg`H\Ya U`]b
`YhnhYf`NY]h`X]g_i h]Yfhž`ghUa a h`UVYf`b]W`h`i bVYX]b[h`Ui g
5bXfYgYbg`6`c[VY]hfU["

hXYa`G]Y`b]W`hg`Ui Z`X]g_fYhY`K Y]gY`fY[Y`b"

hW`[fY]ZY`6]hWc]b`b]W`h`Ubž`]W`[fY]ZY`6]hWc]b!
A]ggj Yfgh`bXb]ggY`Ub"

GY`]b]W`h`j Yf`f[Yfhž`YfbY"

ε`b`7Ufj U`\c`f4 6]hWc]b9ffcf@c[Ł`&(`"GYdhYa VYf
&\$`&%

Ni a`6Y]gd]Y`Ua`&(`"GYdhYa VYf`XYf`6]hWc]b!9l dYfhY`ε`b
7Ufj U`\c`ž`Ui W`VY`Ub`bh`U`g`6]hWc]bYffcf`c[ž`[YbUb`bh.`; i hYb
A cf[Ybž`G]XYWU]bg`_cb_i ff]YfYb`a]h`6]hWc]bž`b]W`h`ig_U`]YfYb"
fG]Y`YI]gh]YfYb`Ui W`b]W`h`k]f`_]W`"Ł`7Ufj U`\c`Zc`[hY`gY]bYa
Hk YYh`a]h`XYa`Zc`[YbXY`A`Y]bi`b[Yb.

- 8]Y`i fgdf0b[`]W`Y`hXY`i bX`XUg`8Yg][b`Y]bYg`Nk Y]!K Y[Y!
DY[g`k i fXY`b]Y`YffY]W`h
- G]Y`gc``hYb`5b_Yf_YhhYb`cXYf`gc`\Y]» Yb
- G]Y`g]bX`k]Y`G\]hWc]bgž`X]Y`i a`HfUbgU_h]cbYb`ghUhh`i a
; Y`X`_cb_i ff]YfYb"
- G]Y`fYXi n]YfYb`b]W`h`gW`ł`ł`Wc]b`J Yfk YbXi`b[gnk YW_
W`h`i`U`i`Z`6]hWc]b

5`YfX]b[g`gh]a a hYb`b]W`h`U`Y`7Ufj U`\c`g`A`Y]bi`b[`ni`G]XYWU]bg

ni "8]Y'6]hWc]b'f6H7Ł'6YZØfk cfhYf'æ\ b'@[\h'hY]'hY'gY]bY'A Y]bi b[
ni '7Ufj U'\cg'5i ggU[Yb.

; i hYb'A cf[Ybž'G]XYWU]bgž'X]Y'j Yfk YbXYb'6H7'XU'XYf
Y]b\Y]a]gWY'J Yfa Õ[Ybgk Yfhi bX'X]Y'6]hWc]b!A]bYf'ZØf
G]WYf\Y]h'b]W'h'a]h'6]hWc]b'_cb_i ff]YfYb ž'@[\h'[Yhk]hhYfh'đ
6YUbhk cfhi b[" ' 5i W'k Ybb'G]XYWU]bgž'X]Y'j Yfk YbXYb'6H7'8U
XUg'bUh]j Y'5ggYh'X]Y'6]hWc]b!A]bYf'b]W'h'ZØf'X]Y'G]WYf\Y]h
VYnU\`hYž'k ØfXYb'g]Y'b]W'h'k Yb][Yf'a]h'6]hWc]b'_cb_i ff]YfYb'U`g
VY]gd]Y`gk Y]gY'@[\hb]b[ž'XUg'; YVØ\ fYb'j cb'XYb'A]bYfb'Ub'X]Y
@B!Fci h]b[!?bchYb'UV'Y]hYh" '\]bni [YZØ[h]'b'gY]bYa 'Hk]hYf!
H\ fYUX" '@W'h'Ui W'hY]'hY'Y]b'DUd]Yf'a]h'XYa 'H]hY` G_U`Yfi b[
j cb'6]hWc]b'a]h'G]XYWU]bg' i bX'Zc`[YfhY.

G]XYWU]bg'\Y'ZYb'Ui W'XUVY]ž'6]hWc]b'ni 'g_U`YfYb"

K Ug'\U`hYb'G]Y'j cb'; Uj]b'5bXfYgYbg'U_hi Y`Ya
h\ YcfYh]gWYb'6'c[VY]hfU['ØVYf'XUg'6]hWc]b!B Yhnk Yf_]b
XYf'Ni _i bZh3'K Ug'\U`hYb'G]Y'j cb'XYa'; YgdfÅW'nk]gWYb
XYb'6]hWc]b!6YZØfk cfhYfb'æ\ b'7Ufj U'\c' i bX'æ\ b'@[\h3
HY]'Yb'G]Y' i bg'æ fY'A Y]bi b['ni 'X]YgYa 'H\ Ya U']b'XYb
?ca a YbhUfYb' i bhYb'a]h"

6]'XbUWk Y]gY. 'G\i hhYfghcW_ž'D]l UVUmž'K]_] '7ca a cbgž'Hk]hYfž'

f bWh]cbfXž'gž']XŁ'o'j Uf'ġž'Z'ġ'1 'X"[Yh9`Ya Ybhg6mHU[BUa YfgŁQ\$Q'
]Z'fX"[Yh9`Ya Ybh6mXf]XŁŁ'fYhi fb/'ġ'1 'X"WfYUhY9`Ya YbhfgŁ/'ġ"]X'1
]X/'ġ"gfWl "\hhdg. #WcbbYWh"ZUWVcc_"bYh#YbSl G#gX_"ġ. l ZVa `1 %/
j Yfg]cb1 j ' "&"/Z'ġ"dUfYbhBcXY"]bgYfh6YZcfYfġž'Z'ġŁ/'qfXcW a Ybhž
fgWf]dhfž'fZUWVcc_! 'ġgX_fġŁ/

6Ygi W\Yb`G]Y`i bg`Ui Z.`_fmdhc!bYk g"Uh