

GhUXhfUXY`b`&\$&' .`6fY]g[ Ui !  
< cWł gWł k Ufnk U`X`fUXY`h  
fY\_c fXj YfXÀWł h][ °

8]Y`6]`Ubn`XYg`GhUXhfUXY`bg`&\$&( `]a` `@UbX\_fY]g`6fY]g[ Ui !  
< cWł gWł k Ufnk U`X`nY][ h`%"` \* ( "\*" ) &`F`UX\_]`ca` YhYfž`' - +  
HYUa`g`i`bX`\*"%)`\*`HY]`bY`a`YbXY"`, VYfnYi [ Yb`G]Y`g]Wł`j`cb  
XYb`VYY]bXfi`W\_YbXYb`9f[ YVb]ggYb`°

B UWł \ U`h][ \_Y]h`Xi`fWł`F`UXZU`fYb.  
9fZc`[ fY]Wł`Yf`5VgWł`i`gg`XYg`GhUXhfUXY`bg  
&\$&( `]a` `@UbX\_fY]g`6fY]g[ Ui !  
< cWł gWł k Ufnk U`X`

⇒ `]a` `@UbX\_fY]g`6fY]g[ Ui !< cWł gWł k Ufnk U`X`k`]fX`Y]b  
VYa`Yf`\_Ybgk`YfhYf`9fZc`[ `]a` `6YfY]Wł`i`a`k`Y`hZfYi`bX`]Wł`Yf`A`cV`]h`h`h  
[ YZY]Yfh`8]Y`X]Yg`À`f][ Y`F`i`bXY`XYg`GhUXhfUXY`bgž`Y]bYf`5\_h]cbž  
X]Y`F`UXZU`fYb`Z0fXYfhi`bX`X]Y`7C`&!6]`Ubn`j`YfVYggYfb`gc`ž  
YbXYhY`a`]h`VYY]bXfi`W\_YbXYb`NU`Yb`i`bX`Y]bYf`[`fc`»`Yb  
6YhY]][ i`b[ "`Hfch`n`XYf`hY]`g`k`]Xf][ Yb`K`Y`hYfVYX]b[ i`b[ Yb`UVYb  
j]Y`Y`60f[ Yf]bbYb`i`bX`60f[ Yf`XUg`F`UX`U`g`:`cfhVYk`Y[ i`b[ ga`]hY`  
[ Yk`À`h`"

5bnU`X`Yf`HY]`bY`a`YbXYb`i`bX`[ YfUXY`hY  
?]`ca`YhYf`

⇒ g[ YgUa`h`\UVYb`g]Wł`\*"%)`\*`DYfgcbYb`Ub`XYf`5\_h]cb`VYhY]][ hž  
X]Y`]b`Y]bYa`NY]hfUi`a`j`cb`XfY]`K`cWł`Yb`0VYf`%"` \* ( "\*" ) &  
?]`ca`YhYf`[ YfUXY`hig]bX`5i`Z`YXYb`9]bnY`bYb`YbhZ]Y`Yb`]a  
8i`fWł`gWł`b]h`&&%ž+`?]`ca`YhYfž`k`Ug`X]Y`6Y[ Y]ghYfi`b[ `Z0f`XUg  
: U`ffUXZU`fYb`]b`XYf`F`Y[ ]cb`i`bhYfghfY]Wł`h`"

Hcd!GhUbXc fhY `i bX `]\fY `@Y]ghi b[ Yb

6YgcbXYfg`YfUi gfU[ YbX`k Uf`X]Y`@Y]ghi b[ `j cb`?]fW`nUfhYb`ž`k c  
ØVYf`%`- "\$\$\$`?`]`ca YhYf`[ YgUa a Y`h`k i fXYb`"6UX`?fcn]b[ Yb  
Zc`[ hY`a ]h`bU`Yni `%' "\$\$\$`?`]`ca YhYfb`ž`k Å`fYbX`6fY]gUW`ØVYf  
- + "\$\$\$`?`]`ca YhYf`VY][ YghYi Yfh`U`h`8]YgY`NU`Yb`nY][ Yb`b]W`h  
bi f`XYb`gdcfh]W`Yb`9`f[ Y]n`XYf`hY]`bY`a YbXYb`Gh`X`hY`ž`gcbXYfb  
Ui W`X`Ug`k UW`gYbXY`6Yk i gghgY]b`Z0f`Y]b`bUW`U`h][ YfYg  
J Yf`\_Y`f`g`j Yf`U`h`Yb`"

J YfY]bg! `i bX `GW`i `k YhhVYk Yfv

æa `FU`a Yb`XYg`K YhhVYk YfvG`[ UV`Yg`Ui W`gdYn]Y`Y`?`UhY[ cf]Yb`ž  
X]Y`ni g`Å`h`]W`Y`A`ch]j Uh]cb`gW`i ZYb`"6YgcbXYfg`VYY]bXfi W`\_YbX  
k Uf`X]Y`@Y]ghi b[ `XYg`?`c`Y[ `Gh`"GYVUgh]Ub`]b`GhY[ Yb`ž`XUg`a ]h  
ØVYf`) &"\$\$\$\$`[ YfUXY`hYb`?]`ca YhYfb`XYb`GW`i `k YhhVYk Yfv  
[ Yk Ubb`"8 UfØVYf`]\bUi g`YffY]W`hY`XUg`A Uf]Y!7i f]Y!; ma bUg]i a  
]b`?]fW`nUfhYb`fi bX`" , "\$\$\$`?`]`ca YhYf`"8]Y`GW`i `Yb`nY][ Yb`XUa ]hž  
k ]Y`k ]W`h][ `XUg`: U`ffUXZU`fYb`Z0f`Y]bY`[ Ygi bXY`i bX  
i a k Y`hVYk i gghY`@YVYbgk Y]gY`gh`"

9b[ U[ Ya Ybh`j cb`l bhYfbY`a Yb`i bX

J Yfk U`hi b[ Yb

I bhYf`XYb`hY]`bY`a YbXYb`:]fa Yb`nY]W`bYhY`g]W`GI D9F BCJ 5  
89G⇌ B`:] A 6<`Ui`g`:] i bXY`Z]b[ Yb`a ]h`%+`\*`&`\$`[ YfUXY`hYb  
?]`ca YhYfb`Ui`g`"8 Ug`@UbXfUhgUa`h`6fY]g[ Ui`!<cW`gW`k Ufnk U`X  
ghY`hY]`b`XYf`?`UhY[ cf]Y`Y`a`hYf`#] Yfk U`hi b[ `a ]h`a Y`f`U`g`&, "\$\$\$  
?]`ca YhYfb`XYb`Gd]hYb`fY]hYf`XUf`"8]YgYg`9b[ U[ Ya Ybh`nY][ hž  
XUgg`Ui W`X`g]h]h]cbYb`]\fYb`6Y]hfU[ `ni`f`: ØfXYfi b[ `bUW`U`h][ Yf  
A cV]`]h`Å`h`Y]ghYb`\_ØbbYb`"

GhUh]gh]\_Yb`i bX`9]bk c`bYfVYhY]`][ i b[

8]Y`J YfhY]`i b[ `XYf`ni fØW`[ Y`Y[ hYb`?]`ca YhYf`dfc`9]bk c`bYf`nY][ h  
GhY[ Yb`U`g`X]Y`U`\_h]j ghY`:] Ya Y]bXY`a ]h`%, ž( `?)`ca YhYfb`ž`[ YZc`[ h  
j cb`5i`a ]h`%`ž) `i bX`6c`gW`k Y]`a ]h`%&ž`-`"8]YgY`GhUh]gh]\_Yb

k Y]gYb`Ui Z`X]Y`c\Y`6Øf[ YfVYhY`][ i b[ `]b`i bX`XYi hYb`XUfUi Z  
`]bž`XUgg`XUg`F UXZU`fYb`U`g`@YVYbggh`]b`XYf`FY[ ]cb`ni bY`a YbX  
Ub`6YXYi hi b[ `[ Yk ]bbh"

Ni \_i bZhgdYfgdY\_h]j Yb`i bX`5VgW`i ggV]`Ub n

8]Y`dcg]h]j Y`6]`Ub n`XYg`GhUXhfUXY`bg`&\$&( `ja`@UbX\_fY]g`6fY]g[ Ui !  
< cW`gW`k Ufnk U`X`gYhnh`Y]b`NY]W`Yb`ZØf`X]Y`K`]W`h][ \_Y]h  
bUW` \U`h][ Yf`A`cV]`]h`hg\_c`bnY`dhY""8]Y`XYhU]`]YfhYb`9f[ YVb]ggY  
g]bX`]a` `hYfbYhi bhYf` \ hhdg. ##k k k "ghUXhfUXY`b"XY#UbX\_fY]g!  
VfY]g[ Ui !\cW`gW`k Ufn`j YfZØ[ VUf""8]YgY` `h]Uh]j Y`V]YhYh`b]W`h  
bi f`Y]bY`D`UhhZcfa ži a`U\_h]j Y`@YVYbggh]`Y`ni`ZØfXYfbž`gc`bXYfb  
Ui W`Y]bY`A`Ø[ `]W`\_Y]hž`XYb`7C`&!5i`gghc`»`ni`fYXi`n]YfYb`i bX`XUg  
6Yk`i`gghgY]b`ZØf`I`a`k`Y`hZFU[ Yb`ni`gW`ÅfZYb"

` `B 5;

8YhU]`g

6Ygi W`Yb`G]Y`i`bg`Ui`Z.`b!U[ "XY