

! "#\$%&"' ("#)*%+, "' -%#-/01\$2"/#%3--"4' 0%5%+/#(2\$#4' %67%8/#' (%9"0' 42/0%/-%"; 0\$0"' (%

<=>=?@%

! "#\$%#\$&"

G7@G% A0/-' (("/#\$F%9']' F/E 1 ' #2%\$#D%J0\$"#"#) %7777777777777786 G7@L% V' DC4"#) %/C0%/H#%1 \$0) "#\$F"\\$2"/#%\$(%(2\$--%H"2, "#%2, ' %4\$(2' %(Q(2' 1 %/-%2, ' %+/FF')' %777777777%E%

%

%

()*"+%&&', "\$%&'

3C2%/-%, /(' %(' (("/#(*% .J&%D' E\$021' #2(%H' 0' %4, \$0)' D%H"2, %E0/E/("#) %(, /02' 0K2' 01 %\$#D%/#)' 0K0\$#)' %)/\$F(%D' F\$2' D%/% PC"20*%#4FC("/#*%\$#D%\$#2"K0\$4"(1%_S.6V` %\$#D%(C))' (2"#)%C02, ' 0%/01 (%/-%E0/-' (("/#\$F% \$#D%0)\$#"\\$2"/#\$F%D']' F/E1' #2%2, \$2%1"), 2% ' %]\$FC\$; F' %/0% .J&%2/%EC0(C' 7%9C0"#)%2, ' %1 /#2, %/-% M'; 0C\$0Q*% \$4, %D' E\$021' #2%502"4CF\$2' D%S.6V%)/\$F(%D' F']\$#2%2/%2, ' "0%D' E\$021' #2\$F%H/0Z%\$#D=/0%2/%/C0% /0)\$#"\\$2"/#1(%1"("/#%\$(%\$%H, /F' 7%)

.#% \$04, %#2/% \$0FQ% E0"F*% \$4"F"2\$2' D%' ' D; \$4Z%(' (("/#(%H"2, % .J&%1 \$#\$)' 0(*%2, ' % .J&%5.6V%J' \$1 *%\$#D% /E' #%2/% .J&%(2\$--%2/%D"(4C((%H, "4, %)/\$F(%H/FF' \$)C' (%' F2%, ' FD\& \$502"4CF\$0\&E0/1"(' \%#D\%H, ' 0' \%H' \%1"), 2% , \$]' \%00' \$2' (2\&E/("2"]' \%1 E\$427\&J, ' 0' \%H\$(\%1 C4, \%/#(' #(C(\%; /C2\%50' \$(\%/-\%/4C(\%2, \$2\%H/CFD\%' '\%]\$FC\$; F' *% \$#D\%1 \$#0\%' | FE-CF\%#("), 2(\%; /C2\%/H\%H' \%(, /CFD\%EE0/\$4, \%#D\%2' 0\$2' \%2, 0/C), \%2, "(\%H/OZ7\%

6½, "0D¼H/#D' 0-CF½, ' 1'½, \$2% 1'0)' D¼H\$(%(''"#)½, '%(20'#)2, %/-¼/11/#%(, \$0' D½)\$FC' (%\$40/((½, '%/0)\$#"\\$2"/#%#%)' F\$2"/#%2/% PC"2Q%#D%#4FC("/#%)/\$F(%#D% T4"2' 1'#2½, \$2%1\$#Q¼/FF'\$)C' (%\$0'%' 'F"#)%\$; /C2½, '%H/0Z¾H"2, "#% .J&%#D%+/FF')' KH"D' *%\$#D% #2, C("\$(1%\$; /C2½, '%E/2'#2"\$F%/0¾0/((KD'E\$021'#2\$F%(Q#'0)"' (%\$(%H'%D'#2"-Q%(, \$0' DÆ0"/0"2"' (*%E0/-' (("/#\$F¾D']'F/E1'#2%EE/02C#"2"' (%/#%4\$1EC(%\$#D%'Q/#D*%\$#D¾H\$Q(%/-¼/##'42"#)%/C0%)/\$F(%H"2, % 0/\$D'0%+/FF')' %\$#D\\$#\$2"/#\$F¾/11"21'#2(%\$0/C#D% PC"2Q*%#4FC("/#*%#D\\$#2"K0\$4"(17%

- '. /010#2')*0#+034%& 5''*'6*\$0+/47\$0#2')*0''*0\$0%&'

3C0% .J&% PC"2Q*%#4FC("/#*%\$#D%\$#2"K0\$4"(1%)/\$F(%\$0' %

E/"#2(%2/%2, '%"-'%/-%/; a' 42(%\$#D%40"2"4\$F%2, "#Z"#)%\$0/C#D%2, ' 1 f%\$#D%(, \$0' D%E0/-' (("/#\$F%D']' F/E 1' #2%\$#D% E0/)0\$ 1 1 "#)%H"2, %/2, ' 0%+/FF')' %D' E\$021' #2(% #)\$)' D%#%E\$0\$FF' F%/0%']' 0F\$EE"#)%H/0Z7%

C

A C C

S]' #%\$(%H' %4/##' 42% 0/\$DFQ%H"2, %#(2"2C2"/#\$F%\$#D%4/#(/02"\$F%#"2"\$2"]' (*%H' %H\$#2%2/%/4C(%/C0%E0"/0"2"' (% "#%\$0' \$(%

+/FF')'7%ST\$1EF'(

N'%(''%|\$FC'%#%,\$]"#)%

7\(\mathfrak{U}\), '\%0\\$ 1 ' \(\mathfrak{H}\)/0\(\mathfrak{Z}\)\(\mathfrak{V}\)-\(\mathfrak{Q}\), '\% .\(\mathfrak{J}\)&\(\mathfrak{K}\)Y'\\$0\%

Α

M"#\$FFQ*%H' %\$0' %H/0Z"#)%0/ 1 %\$\(\mathbb{E}\)0"#4"EF' \(\frac{\psi}{\psi}\)-%

:.J&\(\mathbb{R}\)2" \(\mathbb{R}\)0" \(\mathbb{R}'\)0" --' \(0' \) #2\(\mathbb{R}\)2" \(\mathbb{R}\)0/C\(\mathbb{D}\)E' \(0(E' \)42"]' \((\mathbb{R}' \)2\(\mathbb{R}'\)0/C \(\mathbb{R}'\)0/C \(\mathbb{R}\)0/C \(\mathbb{R}\)0/C \(\mathbb{R}'\)0/C \(\mathb

@7 +/#2"#C'%2/%D']'F/E%\$#D%D'F"]'0%E0/)0\$1(%2,\$2%/(2'0%(2CD'#2%#)\$)'1'#2%\$#D%'\$0#"#)%\$;/C2%2'4,#/F/)QK*%D\$2\$K*%\$#D%";0\$0QK0'F\$2

- ?7 ST\$ 1 EF' (%/-%, ' %Z"#D(%/-%PC' (2"/#(%H' %H\$#2%Z/%\$DD0' ((%#4FCD' d%N, /%(%="(\#/2\%E\$02"4"E\$2"#)\%#\%/C0\% .#2' #("]' (*\%H/0Z(, /E(*\%#D\%2, ' 0\%E0/) 0\$ 1 (i \%N, "4, \%(2CD' \#2(\%50' \%-\%50' \\#/2\%C("\#)\%, ' \%"; 0\$0Qi \%^/H\%D/\% H' \%)\$2, ' 0\%D\$2\$\% \#\%2, ' ('\%E/2' \#2"\\$F\%)\$E(\%\#D\%DD0' ((\%\#Q\\%D"(E\$0"2"' (\%, \$2\\M-1 \%"\#Di \%
- G7 N'%H\$#2%Z/%\$(('((%, 0/C), %\$%J\$4"\$F%SPC"2Q% 1 E\$42%6#\$FQ("(%/C0%4C00' #2%E0\$42"4' (%/0%)\$2, '0"#)%
 -''D;\$4Z*%\$(Z"#)%(C4, %Z' Q%PC' (2"/#(%\$(%H, /%\$0' %H' %2\$FZ"#)%Z/i%, /H%\$0' %H' %' 22"#)%''D;\$4Zi%, /H%
 D/%H'%E/020\$Q%/C0%--'0"#)(%/0%2, '%I/11C#"2Qi%&/1'%-%2, '('%\$0' %\$0' \$\$(%H, '0' %0' E0' ('#2\$2"]' %/4C(%)
 0/CE(%1\$Q%)"]'%C(%1E/02\$#2%E'0(E'42"]'%\$#D%#("), 2(7%
- L7 N'%H\$#2\%2/% C"FD\%#\%2,'\%0'('\$04,\%6F'T\%A-C\#D2\%\\$(\%D\/\#'\\\$\$0/C\#D\%(2CD'\#2(I\%''F\\'--\"4\\$4Q\%\\$0/C\#D\%0'('\$04,\%E0\\$4\2\"4'(7\%)
- <7 N'10'%#2'0'(2'D%#%\$#Q%#("), 2(%H'%4\$#%)\$"#%0/1%, '%+/FF')'1(% 'F/#)"#)#'((%(2CD"'(%\$#D%4\$1EC(% 4F"1\$2'%(2CD"'(*% (E'4"\$FFQ%//Z"#)%2/%, '%D\$2\$%/0%EF\$4'(%H, '0'%H'%4\$#% 0"D)'%)\$E(%/0%CF\$4Z*%.#D")'#/C(*%\$#D%2, '0%(2CD'#2(%'-%4/F/07%)

- CED\$2' %(C; a' 42%, '\$D"#) (*%\$ (%H' FF%\$ (%'2, '0%F\$ (("-"4\$2"/#%' 01 (%\$#D%1 '2\$D\$2\$*%(/%2, \$2%2, '0%\$0' %, "(2/0"4\$FFQ%\$#D%LCF2C0\$FFQ%\$EE0/E0"\$2' 7%J, "(%#4FCD' (%2, '%0' 1 /] \$F%/-%D' (40"E2/0(%2, \$2%50' %E0/; F' 1 \$2"4% \$#D%' EF\$4"#) %2, '1 %H"2, %CED\$2' D%\$#D%\$EE0/E0"\$2' %\$#) C\$)' f%/0% T\$ 1 EF' *%J0"+/%"; 0\$0"\$#(% E\$02"4"E\$2' D%/4\$FFQ%#%1 \$Z"#) %2, '%4, \$#)' %0/1 %g"FF') \$F%F"' #(h%2/%gC#D/4C1' #2' D%'1 1") 0\$#2(h%\$(% E\$02%/-%\$\#\$\$2"/#\$F\%1/]' 1 '#2\%2/\%4, \$#)' %2, "(%"; 0\$0Q%/-%+/#)0' ((%(C; a' 42%, '\$D"#)) 7%%
- ?7 N'%H"F%(CEE/02%(2CD'#2(I%D']"F/E1"#2%'-% 2, "4\$F%\$#D%'4, #"4\$F%\$4'2(%'-%D")"2\$F%/1E'2'#4"' (%\$(% 2, 'Q%H/0Z%H"2, %C(%'#\)\@0\a' 42(\%2\%)']"('\%#D\%\$C)1'#2\%1'2\\$D\\$2\\$\%2, \\$2\% #\\$; F'(\%D"(4/]'0Q\%'-\%C0\%"4, % 4/FF'42"/#(\%#D\%C02, '0\%(2CDQ\%'-\%2, '"0\%/1EF'T\%/#2'T2(7\%6\% T\\$1EF'\%#\%2, "(\%4/#2'T2\%\%2, '\%H/0Z\%'-\%&E'4"\\$F\\/FF'42"/#(\%4\\$2\\$F/)\"#)\%2, '\%4, "\FD0'#I(\% //Z\%/\FF'42"/#\%#D\%#)\\$)"#)\%2CD'#2(\%#\%2, "(\%E0/a'42\% C(\"#)\%#\%\#2"K0\\$4"(2\%\\$2\\$F/)\\$(\%\%)C"D'F\#'\%/0\%, '\%/0")\"#\\$F\\%D'(40\"E2"/#(\%#\%C0\%1'2\\$D\\$2\\$7\%
- G7 J"' D%2/%/C0%#' T2%) /\$F*%H' %H"FF%0']"' H%\$#D% #, \$#4' %\$(%#' ' D' D%2, ' %\$44' (("; "F"2Q%/-%/C0%4/FF' 42"/#% D"(4/]' 0Q%EF\$2-/01 (%\$#D%"#D"#) %\$"D(*%\$(%H' FF%\$ (%2, ' %\$44' (("; "F"2Q%) C"D' F"#' (%\$#D%1 EF' 1 ' #2\$2"/#%/0% 2, ' %4/#2' #2%(2/0' D%H"2, "#%2, ' (' %EF\$2-/01 (

C

3#' %/-%2, '%(20/#)' (2%50' \$(%/-%/4C(%/0% .J&*% (E' 4"\$FFQ%/C0%E' 4"\$FF\/FF 42"/#(*%5DC4\$2"/#\$F%5%4, /F\$0FQ% J' 4, #/F/)Q=9")"2\$F%&4, /F\$0(, "E*%\$#D%' (' \$04, %5%#(20C42"/#%E0/)0\$1 (*%(%D' (")#*%D']' F/E1' #2*%\$#D% 1 '#2/0(, "E%/0%/FF')' % "(2/0"' (%E0/a' 42(*%0\$#)"#)%0/1 %\$04, "]\$F%D' (' \$04, %2/%0\$F% "(2/0"' (%2/%4C0\$2' D% 'T, "; "2"/#(%2/%D")"2\$F%(4, /F\$0(, "E%E0/a' 42(7%N') %\$0' %Z' Q%E\$02#' 0(%#%0' (E/#D"#)%2/%2, ' %PC' (2"/#*%g^/H%D/' (% 2, ' %#(2"2C2"/#% #)\$)' %H"2, %2(%E\$(2i h

- ?7 cC"FD"#)%D")"2\$F%4/FF' 42"/#(%(%\$%E0"/0"2Q%/0%C(*%E\$02"4CF\$0FQ%\$04, "]' (%2, \$2%0' E0' (' #2%2, ' %4/FF')"\$2' %
 'TE' 0"' #4' %0/ 1 %(2CD' #2(I%E' 0(E' 42"]' (7%V' 4' #2%E0/a' 42(%#4FCD' %2, ' %' H"(, %\SH02' 0(\S\#D\%4' 000\%

- G7 N'%H"FF%D0\$H%/#%\$44' (("; "F"2Q% TE' 02"('%H"2, "#% .J&%2/%)']"' H%\$#D%CED\$2' %/C0%EC; F"(, 'D%)' (/C04' (*%(C4, % \$(%2, '% .J&%H'; %E0' ('#4' *%"; ! C"D' (*%/C0%R#/HF' D)' c\$('=J' 4, D/4(*%9")"2\$F%+/FF' 42"/#(*% 247%)
- L7 6(%\$%('0]"4'%#,\$#4'1'#2%#%(CEE/02"#)%(2CD'#2(%H"2,%D"(\$;"F"2"'(*%H'%EF\$#%2/%D']'F/E%H"2,%2,'%9'\$#I(% 3--"4'%E0/\$42"]'%/C20'\$4,%2/%"#4/1"#)%(2CD'#2(%;'-/0'%2,'0%)'2%2/%4\$1EC(*%"#4FCD"#)%"#-/01\$2"/#%\$;/C2%\$D\$E2"]'%2'4,#/F/)"'(%2,'0%1\$0%#''D*%0'(/C04'(%\$]\$"F\$;F'%/#%4\$1EC(*%"247%
- <7 N'%H"FF%/#2"#C'%/%EF\$0%\$%'\$D'0(,"E%0/F'%#%\$D]/4\$2"#)%/0%\$44'((";"F"20%E/F"4"'(%\$#D%E0\$42"4'(%/0%2,'%+/FF')'%\$#D% TE'02%(2\$--%H"FF%/#2"#C'%2/%E0/]"D'%\$44'((";"F"20%/#(CF2\$2"/#%\$#D%CEE/02%/0%/FF'\$)C'(%\$40/((%\$1EC(%H,/%\$0'%40'\$2"#))%#</p>

Δ

:.J&%E0/)0\$1 (%50' %D' (")#' D%2/%; '%CFFQ%\$44' (("; F' %\$#D%#4FC("]' %/0%, '%c0Q#%\\$H0\%/1 1 C#"2Q\%\$#D\%'-2' #\% -/0\%#\% T2' #D' D\EC; F'4\%/1 1 C#"2Q\7

- @7 N'%H"FF%')CF\$0FQ%#]"2'%]\$FC\$2"/#%'-%E0/)0\$1(%H'%'--'0%2/%(''Z%(C))'(2"/#(%'-%H\$Q(%2/%1E0/]'%E0/)0\$1\%\$44'((";"F"2Q%\$#D%#4FC("]"2Q7%
- ?7 N' IFF%']"' H%D\$2\$%\$; /C2%E\$02"4"E\$2"/#%#%E0/)0\$1 (%(C4, %\$(%#2' #("]' (%#%E\$02#' 0(, "E%H"2, %+\$0' '0%#D% +"]"4%\$#)\$)' 1 ' #2%2/%D' 2' 0 1 "#' %H, ' 2, ' 0%2, ' 0' %\$0' %\$#Q%D"(E\$0"2"' (%#%E\$02"4"E\$2"/#*%H, ' 2, ' 0% \$(' D%/#% 0\$4' =' 2, #"4"2Q*%(/4"/' 4/#/1 "4%(2\$2C(*%/0%/2, ' 0%\$42/0(7%-%H' %"#D%D"(E\$0"2"' (%#%E\$02"4"E\$2"/#%/0%#% /C24/1 ' (%0' F\$2' D%2/%/C0%E0/)0\$ 1 1 "#)%_D")"2\$F%#/1 E' 2' #4"' (*%#-/0 1 \$2"/#%"2' 0\$4Q*% 247' *%H' %H"FF% E0/E/(' %#2' 0]' #2"/#(%2/%#/00' 42%2, /(' %D"(E\$0"2"' (%\$#D%H"FF%H/0Z%H"2, %0' F'] \$#2%(2\$Z' , /FD' 0(%2/% ' #(C0' %H' 10' %H/("#)%2, ' %)\$E%#% #(C0"#)%1 /0' %\$44' (("; F' *%#4FC("]' %E0/)0\$ 1 (7%

B

3#'%/-%2, '%H\$Q(%H'%4\$#%4/#20"; C2'%2/% PC"2Q%\$#D%\$#2"K0\$4"(1%\$(%\$%c0Q#%\\$H0%D'E\$021'#2%(%2/% #(C0'%1"#/0"2Q

- L7 N'%H"FF% /FD%.J&%40/((KD"(4"EF"#' =40/((KD' E\$021' #2%, "#Z%\$#Z(%\$0/C#D% 2, "4(%\$#D%C(2"4' %#% 2' 4, =D\$2\$="#-/01\$2"/#%\$#D%D' #2"-Q%H\$Q(%/% DC4\$2' %\$; /C2%, '('%((C' (%\$#D%\$; /C2%C(2"4' K/0"' #2' D% E0\$42"4' (7%N' %H/CFD%, '#%H\$#2%Z/%D' (")#%/11C#"2Q%#2' #("]' (%/0%' \$4, K"#(%\$0/C#D%, '(')(\$1' % "((C' (%\$#D%E0\$42"4' (7%
- @7 J0\$#(E\$0' #40%#%/C0%E0\$42"4' (%\$#D%, /H%H' %(20C42C0' %/C0(' F]' (%'0)\$#"\\$2"/#\$FFQ%/#%, ' % \$4ZK' #D%/% -\$4"F"2\$2' %(, \$0' D%FH\$0' #' ((%\$#D%/1 1 C#"4\$2"/#%H"2, "#% .J&%\$#D%/0%, ' % 0/\$D' 0%/1 1 C#"2Q%
- ?7 N\$Q(% \$4, %2' \$1 \mathref{%} \$1' (\mathref{%} 4/1 1 C#"4\$2"/# (\mathref{%} #D\mathref{K} EF\$# (\mathref{%} \mathref{\$4/C#2\$}; "F"2Q\mathref{%}, '\mathref{%} 4/FF')'\mathref{\mathref{K}} \mathref{\mathref{K}} \mathref{
- G7 ×\$Z"#)%(C0'%H'%, \$]'%\$%H"#D/H%#2/%+/FF')'%\$D1"#"(20\$2"/#%

L7