

!  
!  
!  
!  
!  
!  
!  
!

"#\$\$%&'()\*!\*, !-)\$!. /)01\$2(34\$5!  
"(6)'3\$!\*+, !"01/(17\*+30!'+"#)'+8\$!&#\$\$'\*

!  
!  
!  
!  
!  
!  
!

9'3)(1'\*!: (#; +0)\$(<!  
=0+'(1!>20\$'!  
?\*%!@#BCDE!

!

F 20+!)20!\*66G/07 \*60!\*+\*132(GH#+4!!1(#H!"#\$\$%&'())\$)\*I0,!\*IH1()0\$)IH01/(17\*+30!  
\*)!)20!J\*)20,1\*6!(/!J21'\$!)20!=\*<'(1K)20!\$H'1')#\*6!20\*1)!(/!?\$(\$3(LK'+!MON1#\*1%!(/!BCDBA!  
L2'32!60,!)(!)20!\*110\$)\$!(/!)2100!707N01\$A!)20%!H1(<(40,!\*!6((,!(/!H#N6'3!10\$H(+0\$!)2\*)!  
0#'346%!\$H'660,!(<01!)20!N(1,01\$!(/!)20!&#\$\$'+!MO,01\*)'(+P!>20!\$'I+'/'3\*+30!(/!)20'1!  
QH01/(17\*+30R!3\*+!NO!I\*#I0,!N%!)20!\$)10+!)2!\*+,!, '<01\$')%!(/!)20\$0!10\$H(+0\$A!(/!#HH(1)!  
\*+,!3(+,07+\*)'(+!\*6'40A!)2\*)!L010!<('30,!\$(!<(3\*66%!'+!)20!7(+!)2\$!60\*,'+!I!#H!)(\*+,!  
/(66(L'+!I!)20!)1\*6!(/!S04\*)01'+\*!=\*7#)\$0<'32A!T\*,0;2,\*!>(6(4(++'4(<\*A!\*+,!?'\*1'\*!  
.6%(42'+\*!U\*!0\$!ECA!BEA!\*+,!BVA!10\$H03)'<06%WP!>20!, '\$3(#1\$0!\$#11(#+, '+!I!)20!I1(#H8\$!  
H01/(17\*+30M\*7H6/'0,!N%!)20!H\*\$'\$'(+!\$!\$#11(#+, '+!I!)20!'77'+0+)!100603)'(+!(/!96\*, '7'1!  
"#)'+'!)(!\*!)2'1,!)017!\*\$!H10\$',0+)'(+!?'\*!X!A!BCDBA!10<0\*6\$!7\*+%!0701I'+!I!1'/)\$!'+!&#\$\$'\*8\$!  
\$(3'\*6!\*+,!H(6)'3\*6!/\*N1'3P!.)!\*)!'70!L20+!&#\$\$'\*!/\*30\$!'+310\*\$'+!I6%!32\*660+!'+!I!0#0\$)'(+!\$!  
\*N(#)!\$!+\*)'(+\*6!',0+)'%A!60\*,01\$2'H!A!\*+,!I(60!'+!)20!H(\$)G=(<'0)!L(16,A!)20!\*3)'(+A!\*110\$)!  
\*+,!\$#N\$00#0+!)1\*6!(/!"#\$\$%&'())\$0!<0\$!\*\$!\*+!OH'30+)01!/(1!\*!, '<01\$0!\*11\*%!(/!+\*)'(+\*6!\*+,!  
'+)01+\*)'(+\*6!O#\*40\$P!

>20!,01100!)(!L2'32!H(6)'3\*+A!60\*,01\$!(/!3<'6!\$(3'0)%A!/(66(L01\$!(/!)20!&#\$\$'+!  
Y1)2(,(Z!/\*')2A!\*+,!'+/6#0+)\*6!/'I#10\$!(/!)20!\*1)!\$30+0!'!&#\$\$'\*!1\*66'0,!\*1(#+,!)20!"#\$\$%!  
&'())1\*6!\$H0\*4\$!)(!)20!H\*1)'3#6\*16%/1\*#I2!)!7'+!I!(/!)20!H01/(17\*+30!\*+,!)\$!'7H6'3\*)'(+!\$!  
'+!I\*#I'+!I!&#\$\$'\*8\$!0701I'+!I!\$(3\*6!\*+,!H(6)'3\*6!)10+, \$P!>20!, '\$H1(H(1)'(+\*)06%!2'I2!  
,01100!(/!70,\*!\*)0+)'(+!I'<0+!)(!)20!3\*\$0!N%!)20!F0\$)A!2(L0<01A!2\*\$!\*+,0,!N()2!)07H(1\*6!  
\*+,!\$H\*)\*6!, '70+\$'(+!\$!)(!)20!3\*\$0!M0<(4'+!I!J(6,!F\*1!120)(1'3!N()2!'!&#\$\$'\*!+\*,!\*N1(\*,P!  
>0+\$'(+!\$2\*<0!/6\*10,!NO)L00+!'#)'+'\*+,!'+)01+\*)'(+\*6!H(6)'3\*6!60\*,01\$!(<01!0#0\$)'(+!\$!  
\$#11(#+, '+!I!)20!)1\*+\$H\*10+3!\*+,!'7H\*1)'\*6')%!(/!)20!&#\$\$'\*8\$![\$\$)'30!\$%)07P!"(6)'3\*6!  
\*3)'<'\$)A!7#\$'3\*+A!\*+,!3060N1)'0\$!2\*<0!H#N6'3\*66%!(+'0,!) (I0)201!'+'+)01+\*)'(+\*6!

\$(6', \*1')%L')2!" #\$\$\$!&' (!'+!, 0/0+\$0!(/!/100, (7\$(/!H(6')'3\*6!\*+, !\*1)'\$)'3!OZH10\$\$' (+P!\#)!)!  
'\$!+ ()!0+ (#! 2!) (!)\*40!" #\$\$\$!&' ()8\$!H01/(17\*+30!\*)!/\*30!<\*6#0M!10\*)'+!!)!\$' 7H6%!\*\$!\*+!  
OZH6(1\*)' (+!(/!/100, (7!(/!\$H0032P!!>20!! 1(#HM!/\*1!7 (10!(/\*!3(+30H)#\*6!\*+, !H(6')'3\*6!\*1!)!  
3(6603)'<0!1\*)201!)2\*+!\*!1(34!! 1(#HM! (H01\*)0\$!(+!\*!\$)1'3)!N\*\$'\$!(/!'660! \*6')%]!0\*32!707N01!  
3(+\*\$3' (#\$6!\$\*31!/'30\$!H01\$(+\*6!\$\*/0)%/(1!)20!\$\*40!(/!)1\*+\$7'))'+!!)20!! 1(#H8\$!H(6')'3\*6!  
70\$\$\*!0!'+!0<01%#+\$\*+3)'(+0, !, 07 (+\$)1\*)' (+P!!!

>2'\$!)20\$!\$!#+, 01)\*40\$!) (!OZH(\$0!\*+, !32\*660+!0!\*\$\$#7H)' (+\$!\$#32!\*\$!'+)01+\*)' (+\*6!  
\*+, !&#\$\$\*'+!7'\$10\*, '+!\$!(/!" #\$\$\$!&' ()8\$!', 0(6(1%!\*+, !! (\*6\$P!!?'\$3(+30H)' (+\$!\*+, !2%#01N(60!  
2\* <0!, (7'+\*)0, !)20!, '\$3(#1\$0!)2\*)!/(66(L0, !)20!H01/(17\*+30P!! . !N\*6\*+30, !<'0L!(/!)20!" #\$\$\$!  
&' ()!H20+ (70+ (+!100#10\$!3#6)#1\*6M!2'\$) (1'3\*6!\*+, !H(6')'3\*6!3(+OZ)#\*6'; \*)' (+P!Y<01!)20!  
3(#1\$0!(/!'++0!\$03)' (+\$M)2'\$!)20\$!\$!L'66!OZ\*7'+0!" #\$\$\$!&' ()8\$!H1(0\$)!\*!'+\$!)!20!N\*34, 1(H!  
(/\*!6\*1!0!\$H03)1#7!(/!10\*3)' (+\$!/1(7!H1(7'+0+)!'+, '<', #\*6\$M!\$(3'\*6!7 (<070+)!\$!\*+, !  
106'! ' (#\$!! 1(#H\$P!!>2'\$!\$)#, %!L'66!H\*1\$0!)21(#! 2!)20!(/)0+!#+3(7/(1)\*N60!\*+, !20\*)0, !  
, '\$3(#1\$0!\$#11(#+, '+!!)20!! 1(#H8\$!J21'\$!)!20!=\$<'(1!H01/(17\*+30!\*+, !)20!10\$#6)\*+!)!1\*6M!  
\*+, !, 07 (+\$)1\*)0!2(L!)20!" #\$\$\$!&' ()!H20+ (70+ (+!\*3)0, !\*\$!\*!3\*)\*6%)!/(1!\$01' (#\$!  
, '\$3#\$\$' (+\$!\*N(#)!20!/)#10!(/!H(\$)G= (<'0)!&#\$\$\*P!!!

=03)' (+!-!H1(<', 0\$!\*!2'\$) (1%!(/!" #\$\$\$!&' ()8\$!\*3)'<)'0\$!H1' (1!) (!)20'1!J21'\$!)!20!=\$<' (1!  
H01/(17\*+30P!!-)!H(\$)' (+\$!" #\$\$\$!&' ()M)20'1!70)2(, \$M!\*+, !)20'1!, 0(6(1'0\$!L')2'+!\*!N1(\*, 01!  
3(+OZ)!(/!7#\$'3\*6M!H(6')'3\*6M!\*+, !\*1)'\$)'3!'+/6#0+30\$M!'+36#, '+!!)20!+ ()(1' (#\$!! 1(#H!9'+\*P!!  
" \*1)!(/!)2'\$!103(+)\$1#3)' (+!L'66!106%!(+!'+)01<'0L\$!\*+, !H#N6'3!\$\*)070+)!\$!'<0+!\*!/)01!)20!  
\*110\$)P!!!

=03)'(+!-!)10\*)\$!"#\$\$%&'()\*8\$!\*3)#\*6!H01/(17\*+30M\*\$!L066!\*\$!)20!<'1\*6!7#\$'3!<',0(!(!  
)20!H01/(17\*+30!)2\*)!7\*,0!)207!L(16,6/\*7(#\$M\*\$!)0Z)\$!30+)1\*6!(!)20!#+,01\$)\*+, '+!(!  
)20'1!/\*70!\*+,!)20'1!3(+!)1(<01\$%P!-!)2'\$!\$03)'(+!-!(//01!\*!36(\$0!10\*, '+!(!(!)20!7#\$'3!<',0(8\$!  
6%1'3\$!\*+, !\*!, '\$3#\$\$'(+!(!)20!H(6!)'3\*6!0<0+)!)2\*)!H1(7H)0,!10\*3)'(+M\*\$!L066!\*\$!\*+!  
'+)01H10\*)'(+!(!)20!11(#H8\$!#\$0!(!'7\*!0\$M!H03!/'3\*66%M)2(\$0!(!)20!/07\*60!N(,%!\*+,!)20!  
3\*)20,1\*6!)\$06/P!!!

=03)'(+!---!H1(<',0\$!\*!10\*, '+!(!)20!"#\$\$%&'()\*1'6!'!+!?\$(\$3(L8\$:2\*7(<+'320\$4%!  
^('\$)1'3!)J(#1)P!-)!\$31#)'+';0\$!)20!3(#1)1((7!)\*)3'3\$!\*+,!)20![(#1+\*6'\$7!\$#11(#+, '+!!)20!  
3\*\$0M!'+!L2'32!S04\*)01'+\*!=\*7#)\$0<'32!T\*,0;2,\*!>(6(4(++'4(<\*!\*+,!?'\*1'\*!.6%(42'+\*!  
L010!32\*110,!L')2!Q2((6'I\*+'\$7!#3(77'))0,!N%!\*+!(1I\*+';0,!11(#H!(/!H01\$(+\$!N%!H1'(1!  
3(+H'1\*3!7())<\*)0,!N%!106'I'(#\$!2\*)10,PRD!>2'\$!\$03)'(+!07H2\*\$';0\$!)20!106'I'(#\$!N\*\$'\$!/(1!  
)20!H1(\$03#)'(+!\*+,!0#0\$)'(+!)20!0)2'3\*6!3(+,#3)!(!)20!H\*1)'0\$!'<(6<0,P!!!

=03)'(+!-9!\*+\*6%;0\$!)20!'7H\*3)!(/!"#\$\$%&'()\*!L')2'+!)20!&#\$\$\*\$+!M0,01\*)'(+P!-!,1\*L!\*!  
, '\$)'3)'(+!N0)L00+!(//'3\*6!10\$H(+0\$M!+36#, '+!!)2(\$0!N%)20!"#)'!+\*,7'+('\$)1\*)'(+!\*+,!  
10H10\$0+)\*'<0\$!(/!)20!&#\$\$\*\$+!Y1)2(,(Z!J2#132M!\*+,!H(H#6\*1!10\$H(+0\$!0701I'+!I/1(7!  
\$#32!11(#H\$!\*\$!&#\$\$\*\$+!Y1)2(,(Z!N06'0<01\$M#H\$!

=03)'(+!9!\$H03'/3\*66%!, '\$3#\$\$0\$!)20!3(7H6'3\*)0, !\*+, !(/)0+!7'\$#+, 01\$)((, !  
106\*)'(+2'H!(/!"#\$\$%&'!)(!&#\$\$\*8\$!#1N\*+!(HH('\$)'(+!7 (<070+)P!w010!-!\*))07H)!(  
, 0+)'/%!)20!H1([03]0, !! (\*6\$(/!)20!(HH('\$)'(+8\$!7 (\$)!H1(7'+0+)!60\*, 01\$!\*+, !)20'1!\*))# , 0\$!  
) (L\*1, \$!"#\$\$%&'()8\$!N1\*+, !(/!H1()0\$)!L2'60!0<\*6#\*)'+!!)20!, 01 100\$!(/!' +36#'\$<')%!\*+, !  
0Z36#'\$<')%!, 07 (+\$)1\*)0, !N%!)20!\*+) 'G" #' +!1\*66'0\$!(/!)20!H\*\$!)2100!%0\*1\$P!!>2'\$!\$03)'(+!\*6\$(!  
) (#320\$!(+!)20!<\*N'6')%!(/!)20!(HH('\$)'(+!)(!\*//03)!32\*+!0A!(1!0<0+!\$'7H6%!)(!107 '\*+!  
1060<\*+)P!

! =03)'(+!9-!\$31#)'+'; 0\$!10\*3)'(+!\$) (!!"#\$\$%&'!)!/1(7!N0%(+, !&#\$\$\*8\$!N(1, 01\$A!  
0\$H03'\*66%!' +!)20!x+'0, !=)\*0\$!\*+, !F 0\$)01+!y#1(HO!L2010!)20!!1 (#H8\$!7 (\$)!<(3\*6!  
\$#HH(1)01\$!\*10!N\*\$0, P!-!H(' +)!(#)!)20!H01\$'\$)0+30!(/!J(6, !F \*1!120)(1'3A!

L'66!\$'+4!' +)(!(N\$3#1')%!(1!/' +, !3(+)' +#\*)' (+!' +!)20!' +310\*\$'+I 6%!1\*, '3\*6!' +, !'+)01+\*)' (+\*6!  
\*3)' (+\$!(/!11(#H\$!\$#32!\*\$!M070+P!

?%!10\$0\*132!/(1!)2' \$!)20\$'\$!N0I \*+' +=0H)07N01!(/!BCDB!\* +, !2\*\$!I (+0!(+!) (/(66(L!  
)20!70, '\*!\*+, !31)'3\*6!, '\$3(#1\$0!10I \*1, '+I!"#\$%&' )!\*+, !)20!&#\$'\$\*+!H(6)'3\*6!36'7\*)OP!  
^#0!)(!)20!1030+!)!+\*)#10!(/!)20\$0!, 0<06(H70+) \$!<01%!/0L!\*3\*, 07'3!\$(#130\$!70+)' (+!"#\$%&!  
&' )!\*)\*66P!>2'\$!2\*\$'+030\$\$')\*)0, !2\*)!)20!7\*[(1')%!(/!7%!\$(#130\$!3(70!/1(7!(+6'+0!  
H01' (, '3\*6\$!N()2!y+I 6'\$2G!\*+, !&#\$'\$\*+G!6\*+I #\*!OP!=(70!\$2(1)!\*1)'360\$!\*+, !H(\$)\$!(1'I'+\*)0!  
(+6'+0A!(+!N6(I \$!(1!M\*30N((4!H\*!O\$K \*+, !

"#)' +8\$!\* ++ (#+3070+)!(/!2'\$!' +)0+) '(+\$!) (!1#+!/ (1!\*!)2'1, !H10\$', 0+) '\*6!)017<sup>B</sup>!\*!\$\*)070+)!  
\*33(7H\*+'0, !N%!\*!<(3\*6!10\*3)' (+!/1(7!<\*1' (#\$(HH('\$)' (+!7 (<070+)!)2\*)!! \*'+0, !\*+!  
0+(17 (#\$!\* 7 (#+)!(/!' +)01+\*)' (+\*6!\*))0+) '(+P!!^#1'+!!)20!0+\$#' +!3#6)#10!L \*1!'' #\$\$%&' ()8\$!  
#+3(7H1(7'\$'+!!) \*40!(+!|0+, 01!106'I' (+!\*+, !H(6)'3\$L \*\$!N()2!, 07 (+';0, !\*+, !', (6';0, !N%!  
)20!' +310\*\$'+!6%!H(6\*1'; 0, !3\* 7H\$!\*\$!)20!N\*+, !N03\* 70!\*!

! >2'\$!32\*1\*3)01'\$)'3!\$0)\$!' #\$\$%!'&' (!\*H\*1)!/1(7!)20!/07'+ '\$)GH#+4!N\*+, \$!)2\*)!\$01<0!\*\$!  
)20'1!7#'\$3\*6!'+\$H'1\*)' (+M+\*706%)2(\$0!'+<(6<0, !'+!)20!&' (!|1116!7 (<070+)!(/!)20!0\*16%!  
}C\$P!!>20\$0!F 0\$)!3(\*\$)! . 701'3\*+!N\*+, \$M'+36#, '+I!=60\*)01G: '++0%M!\'4'+!': '66M!\1\*)7 (N'60M!  
w#l l %!\0\*1M\*+, !w0\*<0+\$!) (!\0)\$%M1 (\$0!#H!#+, 01!\*!N\*++01!(/!/07\*60!07H(L0170+)!\*+, !  
1\*I0!'+!)20!7', \$)!(/!\*!l0+01\*6!6\*I!'+!)20!L (70+8\$!1'12)\$!7 (<070+)P!!"1(<(40, !N%!)20!l \*'+\$!  
(/!)20!&'l2!) (!z'/0!3\*7H\*'l +!(1l \*+';0, !N%!)20!J21'\$)'\*+!J (\*6)'+(+M\*3)'<'\$)!L (70+'!'+!)20!  
" \*3'/3!T(1)20\*\$)!N0l \*+!#\$'+l!7#'\$3!/0\$)'<\*6\$!\*+, !\$06/GH#N6'\$20, !/



! --+!\* + ()201!\$\*)070+)!N%!" #\$\$%!&' ()A!20!, '<01\$')%!(/!' +/6#0+30!'\$/#1)201!10<0\*60, A!

)%' +I!)20!N\*+, !) (!N()2!, (70\$)'3!\*+, !'+)01+\*)' (+\*6!)1\*, ')'+\$5!!

-)8\$!H(\$\$'N60!)(/!' +, !/0\*)#10\$!(/!D} }C\$!. 3)' (+ '\$7!' +!(#1!H01/(17 \*+30\$A!L2'60!

, 07 (+\$)1\*)'(+ \$! \* +, !\*1)!H'030\$P!!. 7 (+I!)20!7 (\$)!/\* 7 (#\$!\*10!)20!Q" \*6\*30!&0<(6#)'(+AR!' +!  
L2'32!, 07 (+\$)1\*)(1\$!70)2(, '3\*66%!(<01)#1+0, !\$0<01\*6!H(6'30!<02'360\$!\*\$!\*!\$)\*070+)!  
\*I \*'+\$)!H(6'30!3(11#H)'(+!' +! =)!!" 0)01\$N#1I! \* +, !Q. !^'34!w06, !" 1'\$(+01!\*!)!20!M=\AR!)20!  
7\*\$ \$' <0!H2\*66#\$!H\*'+)0, !(+)(!\*!, 1\*LN1', I0!L2'32!L20+!1\*\$0, !H('+)0, !)20!0103)'(+!\*!)!20!  
M=\!20\*, 0#\*1)01\$P!\#)!' +!\$H')0!(/!)20!6\*)01!H'030!1030' <' +I!)20!BCDC!-++ (<\*)'(+!H1'; 0!/1(7!  
)20!T\*)'(+\*6!J0+)01!/(1!J(+))07H(1\*1%! . 1)\$!' +! ? (\$3(L!9(' +\*8\$!1030H)'(+!' +!)20!H#N6'3!  
\$H2010!2\*\$!N00+!/\*1!/1(7!L \*17P!!=0<01\*6!(/!)20'1!\$)#+)\$!2\* <0!' +<(6<0, !)20!\$2(34' +I!#\$0!(/!

>20!N\*+, 8\$!+\*70!32\*60+!0\$!)20!+0!\*)'<0!(!1, '1)%!3(++()\*'(+!\$#11(#+, '+!!/07\*60!  
!0+!)\*6\*!N%!)07H)'!+!)(!1036\*7!)20!L(1, !QH#\$\$%RM!\*!H1\*3)'30!L')2!1(())!+!)20!&'()|1116!  
7(<070+)P!!. 33(1, '+!!)(![(#1+\*6\$)!z'+, \$\*%!†(6\*, ;5!

M1(7!\* , '+!!\*!)1'+!!(/!1(L6'+!13(+\$(+\*+)\$!)(!20!HO')0!OH')20!0649) (!  
3(+/1(+)'!+!)20!3(++()\*'(+!(/!)20!L(1, !69: .,(1'())!1116\$!H'(+0010, !\*/10+;%!  
(/!6'+!#'\$)'3!\$\*6<\*!0![(N\$!)2\*)!107\*'+\$!3(+)!1(<01\$\*6!) (, \*%P!z0\*, '+!!)2'!\$!  
32\*1!0!L\*\$!)20!N\*+, !\ '4'+!': '66!L2(\$0!/1(+)!L(7\*+! : \*)2600+!w\*++\*!  
/\*7(#\$6!#\$0, !)(!H01/(17!L')2!)20!L(1, !MWX!(\$31\*L60, !\*31(\$\$201!\$)(7\*32!  
\*+, !L2'32!321'\$)0+0, !)\$!D} }E!, ON#)!\*6N#7!L')2!\*!H1(<(3\*)'<0!))605!N: 66Y(  
Q-6//HK3?>(((

>2#\$M! #\$\$\$!&'()!2\*\$!) \*40+!\*!3(+/1(+)\*'(+\*6!\$)\*+30!1!2)!(/!)20!N\*)M/(13'+!L2(0<0!  
0+3(#+)01\$!)207!)(!'770, '\* )06%!0+! \*!0!L')2!)20!\$07\*+) '3\$!(/!)20!1!+\*70!\*+, !0<\*6#\*)0!  
)20!1!(L+!H103(+30H)'(+!\$#11(#+, '+!!)P!>2'\$!0<\*6#\*)'(+!(33#1\$!0<01%)'70!\*+!  
(HH(1)#+'%)!(3(77#+\*3\*)0!)20!N\*+, 8\$!+\*70!\*1\*\$0\$M7\*4'+!!)20!\$H0\*401!(!L1')01!\*!H\*1)!(/  
\*+!(+!('!+!, '\*6(!!N(#)!20!\$\*)#\$!\*+, !70\*+'+!!(/!)20!L(1, !QH#\$\$%PR!>20!11(#H8\$!\*, (H)'(+!  
(/\*+!y+!6'\$266\*+!#\*!0!+\*70!\*6\$(!'7H6'0\$!\*+!y+!6'\$266\*+!#\*!0!7\*140)!(1!\*#, '0+30!/(1!)20!1!  
70\$\$\*!0P!>2'\$!', 0+)'/'3\*)'(+!L')2!\*!L0\$)01+!\*#, '0+30!\$!/1\*#!2)!L')2!'7H6'3\*)'(+!\$!  
10! \*1, '+!L0\$)01+!<\*6#0!\$%)07\$!\*+, !3(+30H)\$!(/!7(1\*6)%P!J(+!\$0!<\*)'<0!&#\$\$\*'+!H1'+)!  
70, '\*!)2\*)!3(+, 07+!)20!#\*\$!0!(/!)20!L(1, !\*10!0#'34)!(30+\$(1!)/1(7!)20!1!3(<01\*!0!(/!)20!  
!1(#H!<\*!)20!#\$\*!0!(/!1\*L6'Z0\$P!Y)201\$!'7H6!H1'+)!20!L(1, !'+!J%1'66'3!)(3(+<0%)20!  
H2(+0)'3!)017!N#)!\* <(' , !\*34+(L60, !'+!!)20!y+!6'\$2!70\*+'+!P!-+!0\*32!3\*\$0!)20!H1'+)!70, '\*!  
0+, (L\$!)20!+\*70!0" #\$\$\$!&'()R!L')2!\*+!\*#1\*!(/!(N\$30+)'%!\*+, !/(10'I++0\$!)2\*)!301)\*'+6%)20!  
\*#, '0+308\$!1030H)'(+!(/!)20!N\*+, P!

!

---

DC!z'+, \$\*%!†(6\*, ;!QN: 66Y(-!w\* <'+!!\*!?(70+)PR!M98.H3(. #!P!B•!BCDBP!  
[2\)\)H5{L L L P \\$ 6 \\*}OP3\(7{\\*1}360\\$ {, \(#N60•Z{, \(#N60Z{BCDB{C•{•H#\\$\\$\\$•'\\$•2\\* <'+!•\\*•7\(70+\)•H#\\$\\$\\$•1'•\(\)•1\\*6•H#  
\\$•\)20•H•L\(1, •N\\*34•+•\)20•\\$H\(6'!2\)•P2\)76€', , \\$7•\)L•N#\)\)\(+•32#•+4%](#)

--!

. /)01!)20'1!MON1#\*1%!BD!BCDB!H01/(17\*+30!+)20!J\*)20, 1\*6!(/!J21'\$!)20!\*=\* <' (1!<br>"#\$\$%!&'(!L(#6, !0+)01!' +)(!\*!H01'(!(/!L(16, L', 0!/\*70!31'7'+\*6!)1\*6!+ , !/(1!)L(!(/!)20!<br>, 0)\*'+0, !707N01\$!3(+<'3)'(+!\*+, !H1'\$(+P!.. 7(+!!)20!/'<0!N\*+, !707N01\$L2(!H\*1)'3'H\*)0, !<br>' +!)20!H01/(17\*+30!(+6%!T\*, 0; 2, \*!>(6(4(++'4(<\*!S04\*)01'+\*! =\*7#)\$0<'32!+ , !?\*1'!\*<br>. 6%(42'+\*!L(#6, !N0!\*110\$)0, !)20!107\*\*'++!!)L(!707N01\$!2\*<' +! !/60, !)20!3(#+)1%)(!<br>H1()03!)!20'1!', 0+)'!0\$!/1(7!)20!H(6'30P!

\0/(10!)20!OZ)0+\$<0!60! \*6!\*+, !H(6!)'3\*6!3(+ \$00#0+30\$!(/!)2'\$!3(+301!)(!NO!<br>#+, 01\$)((, !!)!\$!+030\$\$\*1%)(!/'1\$)!3(+ )OZ)#\*6'; 0!N()2!)20!3(+ )0+)(/!)20!H01/(17\*+30!\*+, !<br>)20!6(3\*)'(+P!>20!/'<0!L(70+!\*/)01!0+)01'+!!)20!3\*)20, 1\*6!H1(300, 0, !)(!, (+!)20'1!<br>N\*6\*36\*<\*\$!)\*40!)20'1!H6\*30\$!(+!)20!\$(60\*\$!+ , !4+006!L2'60!31(\$\$'+!!

Y#)RP!!-+!T (<07N01!BCDBM/I -H(U.98L.G<8\$!LON\$')O!H#N6'\$20, !L2\*!)!) (#)0, !\*\$!)20!Q/'1\$)!6')01\*6!  
)1\*+\$6\*)' (+R!(/!)20!\$(+I 8\$!6%1'3\$M L2'32!\*33(7H\*+'0\$!)20!J%1'66'3!)0Z)PDD

---

[DD!v0//10%!> \\*%601AQF 2\\*\)!" #\\$\\$%!&'\(\)8\\$!#"#+4!"1\\*%018!&O\\*66%!=\\*', PR! / -H\(U.98L.G<3\(T \(<07N01!•A!BCDBP!!  
2\)\)H5{ {L L L P}20\\*\)6\\*+\)'3P3\(7 {'+'01+\\*\)' \(+\\*6{\\*132'<0{BCDB{DD{L2\\*}GH#\\$\\$%G1'\(\)\)\\$GH#+4GH1\\*%01G10\\*66%G  
\\$\\*', {B@V~@B{!](#)

9'1I'+!N'1)2GI'<01!(/!| (, M  
, 1'<0!\*L\*%!"#)'+'!  
^1'<0!\*L\*%!"#)'+M, 1'<0!\*L\*%!"#)'+'!  
!  
\6\*34!/1(34M! (6, 0+!OH\*#60))O\$!  
"\*1'\$2'(+01\$!31\*L6!N(L'+I!!  
%)(L\*1, !)20!H1'0\$)M, #1'+I!)20!y#32\*1'\$)\$!  
M100, (7<\$! 2(\$)!%2\*\$!I (+0!)(!20\*<0+!  
. !I \*%6H1', 0!H\*1\*, 0!%2\*\$!N00+!\$!\$0+)!)(!='N01'!\*  
'+'\$2\*3460\$!  
!  
>20'1!32'0/!\$\*'+)!'\$!)20!20\*, !(/!)20!: | \!  
w0!60\*, \$!13(+<(!(/!H1()0\$)(1\$!)([\*'6!  
=(!\*\$!+())!(!+\$#6!)!20!w(6'0\$)!Y+0!

M1 (7!)20!<01%!/ '1\$)!<01\$0M!)20!6%1'3\$!3\*66!\*)0+)' (+!) (!)20!<'1)#\*66%!'+0Z (1\*N60!)'0!  
NO)L00+!106'I '(+!\*+, !H(6)'3\$!'!H(\$)\$G=(<'0)!&#\$\$'\*M!L2'60!)#1+'+!!)20!106\*)' (+\$2'H!(+!)\$!  
20\*, !)(!H(\$)' (+!\$#HH(1)!"#\$\$%&'()8\$!(L+!1\*, '3\*6'\$7P!>2'\$!36(\$0!106\*)' (+\$2'H!NO)L00+!)20!  
32#132!\*+, !)20!\$\*)0M'+!\$H')0!(/!\*!3(+)\$')#)' (+\*6!\$0H\*1\*)' (+!NO)L00+!)20!)L (DVM!'\$!\*!10\$#6)!(/!  
)20!\*+)'6106'I '(+!H(6'3'0\$!(/!)20!=(<'0)!x+' (+P!>20\$0!H(6'3'0\$!60, !)(!\*!H01\$'\$)0+)\*+, !0<01G  
'+)0+\$'/%'+!!, 0/0+\$'<0+0\$\$(/!&#\$\$'\*+!Y1)2(, (Z!\*I\*\*+\$)!\*+%!H0130'<0, !0Z)01+\*6!)210\*)!' +!  
)20!H(\$)\$G=(<'0)!, 03\*, 0\$P!

>20!2'\$)(1%!(/!)20!J\*)20, 1\*6!(/!J21'\$!)!20!\*=<'(1!3\*+!\$20, !6'I2)!(+)(!)20!\$%7N'('\$'\$!  
NO)L00+!)20!\$\*)0!\*+, !)20!32#132!' +!)20!H(\$)\$G=(<'0)!&#\$\$'\*P!>20!103(+)\$1#3)' (+!(/!)20!  
3\*)20, 1\*6!' +!BCCC!2\*\$!N03(70!\*!\$)'7#6#\$/!(1!)20!32\*+!0\$!' +!(//3'\*6!=(<'0)!\*+, !H(\$)\$G=(<'0)!  
)#), 0\$)(L\*1, \$!106'I '(+!)21(#!2(#)!20!)L0+)'0)2!\*+, !L0+)%6/'1\$)!30+)#1'0\$P!! / 20!  
J\*1+0!'0!J0+)018\$!\*+\*6%)!?'\*1'\*!z'H7\*+!06\*N(1\*)0, !(+!)20!1(60!(/!)20!&#\$\$'\*+!Y1)2(, (Z!  
J2#1325!Q>20!! (<01+70+)!106'0\$!(+!)20!32#132!/(1!6(%\*6)%!\*+, !\$#HH(1)M\*+, !)20!32#132!2\*\$!  
\*6L\*%\$!106'0, !(+!)20!\$\*)08\$!!0+01(\$')%, P^#1'+!!"#)' +8\$!0603)' (+!3\*7H\*'I +M\*!+ #7N01!(/!  
, 03'\$' (+\$!L010!7\*, 0!)2\*)!L010!NO+0/'3\*6!) (!)20!32#132M'+36#, '+!!(+!10\*6!0\$\*)0!\*+, !  
N\*34'+!!(/!1!06'I'(\$!\$32((6\$PRD-!>2#\$M!, #1'+!!)20!"#)' +!H10\$', 0+3'0\$!\*+, !H1'70!  
7'+'\$)1\*)' (+M!20!L\*\$!\*N60!)(! \*\*'+!\*!\$'I +/'3\*+)\*7 (#+)!(/!H(6)'3\*6!\$#HH(1)!/1(7!)20!  
(1)2(, (Z!/\*')2/#6!N%!

Spl sgdj e!ei e!Žpdj !-prj e!i ™kl e!e! psdgbce!U>20!^\*%!(/!=\*' +)! "0)01!\* +, !=\*' +)!  
M0<1(+\*'!(1!>20!^\*%!(/!M\*7'6%!z(<0!\*+, !M\*')2/#6+0\$\$WP!!y\$\$0+)'\*66%)20!L2(60\$(70!&#\$\$\*' +!  
Y1)2(, (Z!\*+\$L01!)(!)20!9\*60+)' +08\$!^\*%!(/!)20!F 0\$)!)2'\$!2(6', \*%L\*\$!70\*+)!)(!0+3(#1\*I 0!  
\$)1(+!/\*7'6%)'0\$!' +!(1, 01!)(!, 0310\*\$0!)20!\*N%\$7\*6!&#\$\$\*' +!, '<(130!1\*)0!\*+, !'+310\*\$0!)20!  
\$)\*I +\*)'+I!&#\$\$\*' +!N'1)2!1\*)0!/(1!)20!I ((, !(/!)20!+\*)' (+P!!>20!/\*<(1\*N60!36'7\*)0!310\*)0, !N%!  
)20!I (<01+70+)!/(1!)20!32#1328\$!\*3)'(+!H1(7H)0, !''\*)1'\*132!: '1'66!)(!\$)\*0!, #1'+I!''#)' +8\$!  
BCDD!0603)'(+!3\*7H\*'I +!)2\*)!'#)' +!'\$!\*!Q7'1\*360/1(7!| (, R!\*+, !)2\*)!20!2\*, !Q103)!'!0, !)20!  
31((40, !H\*)2!(/!2'\$)(1%PRD@!!!  
  
! "#\$\$%&'()8\$!\*HH0\*6!)(!)20!9'11'+!?'\*1%!'\$!\*+\*)0)7H)!(!32\*660+!0!)20!H6\*)'#, 0!)2\*)!  
"#)' +!'\$!/\*<(10, !N%| (, !)(!1#60!(<01!&#\$\$\*'P!-+!)20'1!H1\*%01!)20%!' +\$'\$!)2\*)!)1#6%! 0<(#)!  
N06'0<01\$!+00, !+ ()!N03(70!3(7H6\*30+)!



\*33#0\$, !N%[(#1+\*6\$)\$A!)20!w06\$'+4!|1(#H!U\*!H1(7'+0+)!&#\$\$'+!2#7\*+!1'12)\$!  
(1I\*+';\*)'(+W!#+, A!(/!3(#1\$0M''#\$\$!&' )M!(/!L(14'+!1!L')2!)20!: |\PRDX!!>2'\$!: |\!3(++03)'(+M!  
(33#11'+!1!\*)!\$#32!\*!2'12!60<06!(/!)20!J2#1328\$!\* , 7'+'\$)1\*)'(+M!)1(+!6%!, '\$310, ')!\$!)20!'7\*!0!  
(/!H'0)%!H1([03]0, !N%)20!"\*)1'\*132%!\*+, !\$007\$!)(!, '103!)20!\$(+!8\$!\*+)'H\*)2%!(!)20!J2#132!  
\*\$!\*+!'+'\$)')#)'(+M\*+, !+(!)!)20!H\*1'\$2'(+01\$M!70+)'(+0, !'+!)20!+0Z)!6'+0P!!>20!H\*1'\$2'(+01\$!  
\*10!H(1)1\*%0, !\*\$!\$#N\$01<'0+)M#+, 01!)20!' +/6#0+30!(/!)20!H(L01/#6!H1'0\$)!UL')2!2'\$!H(L01/#6!  
3(++03)'(+W!L2('!'\$!\*+!\*3)(1!\*+, !+(!)!)NO!1#\$)0, P!! \$!/100, (7!'\$!, 0H'3)0, !\*\$!\$\*310, M!  
2\*<' +!IQI (+0!)!20\* <0+R!'+!)20!+0Z)!6'+0M!)!\$!'7H6'0, !2\*)!)20!10H10\$\$'(+!(/!2(7(\$0Z#\*6')%!  
'+!&#\$\$\*!U\*!2(GN#))'+!\$\$#0!/(1!\$(70!707N01\$!(/!)20!\*+)'G"#)+'!(HH('\$)'(+W!'!\$'+/#6M\*+, !  
)2\*)!)20!"#)+'\* , 7'+'\$)1\*)'(+!2\*\$!, 0/'0, !| (, 8\$!L'\$20\$P!!!

! >20!6'+0!NO)L00+!)20!\$03#6\*1!7#+ '3'H\*6!\*, 7'+'\$)1\*)'(+!\*+, !)20!106'I'(#\$!  
\*, 7'+'\$)1\*)'(+!'!/#1)20!N6#110, !L')2!)20!+0Z)!6'+0!\*N(#)!"#)+'M!L')2!2'\$!(L+!H10\$)'I'(#\$!  
: |\!N\*34I1(#+, MNO'+!!)20!32'0!IQ\$\*'+)R!(/!)20!J2#132P!!>20!\*\$\$01)'(+!(/!\*!\$0H\*1\*)'(+!(/!  
32#132!\*+, !\$\*)0!'!\$!L2(66%!7(340, !2010M\*\$!)20!6%1'3\$!, 0\$31'NO!2(L!)20!H(6'30!\*110\$)!  
H1()0\$)01\$!(1!'+\$#6)' +!!)20!20\*, !(/!)20!"\*)1'\*132%M!: '1'66!-M)2010N%!H1()03)' +!!)20!7%)2!(/  
H'0)%!\*\$\$(3'\*0, !L')2!2'7P!! !3(7H\*1'\$(+!3\*+!NO!, 1\*L+!2010!)(!\*!301)\*'+!=(<'0)!H1\*3)'30!(/  
7%)2(6(I';'+!IJ(77#+'\$)!H#N6'3!/'!#10\$M!\*H1\*3)'30!)2\*)!'\$!)20!\$#N[03]!(/!)1\*<0\$)!'+!)20!  
=(!)\$. 1!)1\*, ')'+PD\*!!>20!1\*<0\$)!'+!)2'\$!3\*\$0M!2(L0<01M!\$!\*67(\$)!\*\$!7#32!)20!10\$#6)!(/  
\$6(HH'+0\$\$!(+!)20!H\*1)!(/!)20!"\*)1'\*132%!\*\$!)!\$!)20!10\$#6)!(/!)20!0//(1)\$!(/!"#\$\$!&' )!\*+, !  
)20'1!\$%7H\*)2'; 01\$P!!-+!BCDBM!7(+ )2\$!\*/01!"#\$\$!&' )8\$!\*110\$)M!\*!H2() (11\*H2!(/!"\*)1'\*132!

: '1'66!/0\*)#10, !(+!)20!(//'3'\*6!LON\$')0!(/!)20!32#132!H1(7H)0, !\*+!(#)31%!'+!)20!H#N6'3!  
\$H2010M\*\$!)!L\*\$!, '\$3(<010, !)2\*)!)20!"\*)1'\*132!L\*\$!L0\*1'+I!\*!'ECACCC!\10#I#0)!  
)'70H'030P<sup>D3</sup>!!y<0+!7(10!\$3\*+, \*6(#\$!L\*\$!)20!\*)07H)!N%!20!LON\$')08\$!0, ')(1\$!)(!, 060)0!)20!  
)'7

H10\$', 0+)'\*6!, 03100W!) (!' 7H(1)!6#Z#1%!3\*1\$!U\*\$!L066!\*\$!) (N\*33(W!, #)%

J\*)20, 1\*6!(/J21'\$!)20!<\*' (1#32 (\$0+!\*\$!)20!<0+#0!/(1!)2'\$!\$(+I8\$!H01/(17 \*+30#L \*\$!70\*+))!  
)(!\* , , !)(!)20!+#\*+30!\*+, !\$%7N(6'3!70\*+'+!!(/!)20!\*3)!L2'60!\$'7#6)\*+0(#\$6!\*3)' +I!\*\$!\*+!  
\*7H6/'01!/(1!)20!70\$\*\$!0!)(!0\*32!)20!10\$)!(/!&#\$\$'\*!\*, !)20!L(16, P!y<01!\$'+30!)20!(1'I'+\*6!  
3\*)20, 1\*6!L\*\$!N#'#)!\*\$!\*+\*)' (+\*6!7 (+#70+)!) (!&#\$\$'\*8\$!<'3)(1%'+!)20!"\*)1' ()'3!F \*1!(/!D•DB!  
\*I\*\*+\$!)20!'+<\*\$' (+!(/!T\*H(60(+8\$!/(130\$#)20!<\*1' (#\$!)1#3)#10\$!)2\*)!2\*<0!(33#H'0, !)20!  
\$H\*30!\*)!9(642(+4\*!(+)20!N\*+4!(/!)20!)? (\$3(L!&'<01!2\*<0!10H10\$0+)0, !'+!)#1+)20!\$\*)08\$!  
+\*)' (+\*6'\$!)10\*, '+!!(/!Y1)2(, (Z%#)20!\$\*)08\$!\*)07H)!\*+, !/\*'6#10!)(!10H6\*30!Y1)2(, (Z%!L')2!  
=)\*6+'\$!)7\*)01\*\*6'\$!)\$%7N(6'\$7#\*+, !#6)'7\*)06%!\*!10)#1+)!(!)20!+\*)' (+\*6'\$!)10\*, '+!!(/!  
Y1)2(, (Z%!L')2!7(10!)2\*+!\*!2'+)!(/!+0LG&#\$\$'\*+!/6\*\*1P!

>20!H#1H(\$0!(/!)20!(1'I'+\*6!3\*)20, 1\*6!\*\$!\*!7 (+#70+)!)(!)20!, 0/0\*)!(/!T\*H(60(+  
'+3(1H(1\*)0, !)20!N06'0/!)2\*)!)20!"\*)1' ()'3!F \*1!L\*\$!\*!, '<'+06%!' +/6#0+30, !\$)1#I I60P!QM(1!)20!  
, 00H6%106'I' (#\$!7\*[(1')%!(/!)20!3(#+)1%#)20!'+<\*\$' (+!L\*\$!| (, 8\$!H#++'\$270+)!/(1!"0)01!)20!  
|10\*)8\$!H(6'3%!(/!L0\$)01+'; \*)' (+!'+!)20!0'I2)00+)2!30+)#1%#\*+, !/(1!)20!3(+ \$00#0+)!N0)1\*\*%6!  
(/!+\*)' (+\*6!<\*6#0\$!31%)\$)\*66'; 0, !'+!Y1)2(, (Z%P!. 33(1, '+I6%#)20!\$H03)\*3#6\*1!<'3)(1%'+!)20!L\*1!  
\*6\$(!L\*\$!6\*1!06%1030'<0, !\*\$!, '<'+0!\*\$\*6<\*)' (+P!-+!\$2(1)!)20!<'3)(1!L\*\$!\*\$\$ (3\*)0, !60\$!L')2!  
)20!\$\*)0!)2\*+!L')2!)20!H0(H60!)207\$06<0\$!\*+, !)20'1!106'I' (+PRBB!! !H\*1\*6606!3\*+!NO!, 1\*L+!  
NO)L00+)20!N\*346\*\$2!\*I\*\*'+\$!)20!106'I' (#\$!10/(17\$!(/!"0)01!)20!|10\*)!\*+, !301)\*\*'+!  
3(+0)7H(1\*1%!10\$H(+ \$0\$!)(!)20!(+I ('+I!'+/6#Z!(/!L0\$)01+!', 0\*\$!\*+, !3#6)#10!'+) (!&#\$\$'\*#  
L2'32!\$H'40, !\$2\*1H6%!(/66(L'+I!)20!3(66\*H\$0!(/!J(77#+'\$7P!-+, 00, #!"\*)1\*132!: '1'66!0<(40, !  
)20!+\*)' (+\*6!707(1%!(/!)20!/I2)!\*I\*\*'+\$!)20!M10+32!'+<\*\$' (+!/(66(L'+I!"#\$%&'&')8\$!\*3)!'+!  
)20!3\*)20, 1\*6#)\$\*)'+I!)2\*)!Q)2(\$0!L2(!L(#6, !'+<')0!#\*\$!66!)(!7(34!(#1!\$21'+0\$!10[03]!(#1!

BB!^7')1!<=, (1(<#QT\*)' (+\*6!?(+#70+)\*6'; \*)' (+!'+, !)20!" (6)'3\$!(/!<3\*605!>20!&3(. 2(3)0. . /F 1. 11Tf[(33#H'0, !!1T3(0)1\*6\$.



06070+)\$(/!(#1!+\*)'(+\*6')%PBRB@!>20!\*+3'0+)\*132')03)#1\*6!/0\*)#10\$H10\$0+)!'>(+8\$, 0\$I +!  
60+)!)207\$06<0\$I) (!2'I 26'I 2)' +I!&#\$\$'\*8\$!' 7H(1)\*+30!' +!)20!J21'\$)'\*+!L(16, !\*+, !3(7N'+'+I!  
106'I'(#\$!I 6(1/'3\*)'(+!L')2!+\*)'(+\*6'\$)!I (\*6\$P!!\%!H6\*3'+I!' 7H\*1)' +I!)20!&#\$\$'\*+!y 7H'10!L')2!  
)'60!(/!\$#330\$\$ (1!) (!)20!\%; \*+)' +0!y 7H'10M!)20!3\*)20, 1\*6!L \*\$!) (!\*3)!\*\$!\*\$'I +\*6!) (!)20!L(16, !

)2\*)^R^BX!. 7 (+I!)20!&#\$\$' \*+!H#N6'3A!' +36#, '+I!, 0<(#)!Y1)2(, (Z!N06'0<01\$A!)20!103(+)\$1#3)'(+!  
(/!)20!3\*)20, 1\*6!L \*\$!\*6\$(!/1\*#I 2)!L')2!3(+1(<01\$%P!! | 0(I1\*H201!^ 7')1'!=', (1(<!L1')0\$5!

!Y+0!Y1)2(, (Z!H1'0\$)!3(+, #3)0, !\*+!#+ (/!3'\*6!(H'+ '(+!H(66!\*+, !L \*\$!\$#1H1'\$0, A!  
+(!)2\*)!, '//010+)!HO(H60!L010!\*I \*'+\$)!10\$(1\*)'(+!N#)!2\*)!)20'1!\*1I # 70+)\$!  
L010!N\*\$0, !(+!)20!\N60A!&#\$\$' \*+!2'\$)(1%A!\*+, !3#110+)!10\*6')'0\$5!)2\*)!) (L \*\$)0!  
7'66' (+\$!(/!, (66\*1\$!' +!\*!3(#+)1%!L')2!7'66' (+\$!(/!2( 7060\$!\$!'\$!'+!])2\*)!32#132!  
3(+)\$1#3)'(+!+!&#\$\$' \*+!6L \*%\$!'\$!\*\$\$ (3'\* )0, !L')2!3(11#H)'(+!A\*+, !)2\*)!)20!  
"\*)1'\*1328\$!3#110+)!J\*)20, 1\*6!(/!yH'H2\*+%!'\$!\$07'G07H)!0<0+!(+!'7H(1)\*+ )!  
2(6', \*%\$P!!>20!H1'0\$)!2'7\$06/!'\$!' +!/\*<(1!(/!)20!103(+)\$1#3)'(+!N#)!+(!)\*!)2'\$!  
‡\ (6\$20<'4!H\*30P^B\*!

F ')2!J21'\$!)20! =\* <'(1!0Z2'N')'+I!\*!, (#N60!', 0+)'%!\*\$!

/1(7!\*+!0\*16'01!\$H(+)\*+0(#\$A!6601 \*6!



(+!\$#\$H'3'(+PRE-!M#1)2017(10M!. 6%(42'+\*8\$!6\*L%01!T'4(6\*!' (6(; (<!\*1I #0, !, #1'+I!)20!\*HH0\*6!  
)2\*)!)2010!L\*\$!' +\$#/'3'0+)!0<', 0+30!)(!\$#HH(1!)20!36\*'7!)2\*)!2'\$!36'0+)!L\*\$!' +, 00, !\*7(+I!  
)20!7\*\$40, !L(70+!H01/(17'+I!(+!)20!\$(60\*\$!(/!)20!3\*)20, 1\*6PE@!! 33(1, '+I!)(!H10\$\$!  
3(<01\*I0!/1(7!)20!20\*1'+I!'" (6(; (<!7\*, 0!\*!\$H0032!07H2\*\$'; '+I!)2\*)!)!0L\*\$!)20!  
' +<0\$)'I\*)' (+8\$!10\$H(+ \$'N'6')%!) (!H1(<0!, 0)0+) '(+!L\*\$!+030\$\$\*1%!, #0!) (!(+0!(/!)20!/(66(L'+I5!  
)20!\$#\$H03)0, !H01\$ (+!7\*%' +)01/010!L')2!' +<0\$)'I\*)' (+M/600!/1(7![#\$)'30!(1!, 0\$)1(%!  
0<', 0+30AREX!31')01'\*!L2'32!20!\*1I #0, !, ', !+ ()!\*HH6%!) (! 6%(42'+\*P!w(L0<01M!, #1'+I!)20!

\$#11(#+, '+I!)20!3\*\$OP!!-+!\* , , ')'(+)(!1(#+, G)20G36(34!<', 0(!\$#1<0'66\*+30!(/!)20!L(70+!' +!  
[\*'6! = \*7#)\$0<'328\$!6\*L%01!9'(60))\*!9(642(<\*!3(7H6\*' +0, M)20!H(6'30!QH(\$)\$0, !\*66!(/!)20!I '16\$8!  
H01\$(+\*6!' +/(17\*)' (+!(+)20!+0)P!!-)!\$!/(1!)2'\$!10\*\$ (+!)2\*)! = \*7#)\$0<'32!' +)'\*66%!2', !20!10\*6!  
+\*70!\*+, !3\*660, !20!\$06/!-1'+\*!z(4)0<\*PR<sup>VD</sup>!!>20!H#N6'3!1060\*\$0!(/!)20!+\*70\$!\*+, !\* , , 10\$\$0\$!(/!  
)20!'#\$%&!&'()!N\*+, !707N01\$!10\$#6)0, !'+!\$0<01\*6!)210\*)\$!NO'+I!7\*, 0!\*I\*'+\$!)!20'1!106\*)'<0\$M!  
'+36#, '+I!. 6%(42'+\*8\$!\$(+PVB!!!!

. \$!)20!H10G)1'\*6!H1(300, '+I \$!\*+, !0<0+)#\*6!



\*+, !)20!H10\$0+30!(/!\*!J21'\$)!106'3K \*!\$L \*)32!(/!)20!w(6%!>#+ '3!L(1+!, #1'+!!)20!" \*\$\$'(+K '\$!  
\*))0\$)0, !)(!N%!\*66(/!)20!<'3)'7\$!'!+)20!' +, '3)70+)!, (3#70+)\$P!!!

>20!)0\$)'7 (+ '0\$!032(A!2(L0<01A!)20!H#N6'3!\$)\*'070+)!7\*, 0!, #1'+!!\*!?! (\$3(L!32#132!  
\$01<'30!N%!"\*)1'\*132!: '1'66!/(66(L'+!!\*!7 (+)2!(/!\$'60+30!(<01!)20!"#\$\$%!'&'!)!H01/(17\*+30P!  
w0!#\$0\$!)20!H6\*)/(17!(/!)20!\$01<'30!)(!<('30!2'\$!3(+, 07+\*)'(+!(/!)20!\*3)!+!/1(+)!(/!\*+!  
\*#, '0+30!(/!, 0<(#)!N06'0<01\$A!\$)\*'+!!)2\*)!&#\$\$\*!QL'66!2\* <0!+ (!/#)#10!'!/\$\*310, !\$21'+0\$!\*10!  
, 0\$031\*)0, A'!)2'\$!, 0\$031\*)' (+!'!\$00+!N%!\$(70!\*\$!<'1)#0M\*\$!\$(70!H1(H01!0ZH10\$\$'(+!(/!  
H(6')'3\*6!H1(0\$)A!\*\$!\$(70!\*HH1(H1'\*!)0!\*3)'(+!(1!2\*1760\$\$!3. 110'0. 1(!)-2(')0. 476526611Tf/F 1. 181Tf330.



! >21(#12(#!)20!, #1\*)'(+!(/!)20!)1'\*6!v#, 10!? \*1'+ \*!=%1(<\*!107 \*'+0, !106#3)\*+!)(!  
\*66(L!7#32!/1(7!)20!, 0/0+\$0!'!)017\$(/!32\*660+'+!)20!H6\*'+'//\$(1!3\*66+'!)20'1!(L+!  
L')+0\$0\$!)(!)20!\$)\*+, #!\*)10+, ![(#1+\*6'\$)\$!H10\$0+)\*!)20!)1'\*6!L010!0#'#34!)(H('+)!(!)#P!  
?'1'\*7!y6, 018\$!'7H10\$\$'(+!(/!)20!H1(300, '+!\$!\*\$!\$20!3(<010, !)20!)1'\*6!H(1)1\*%\$!\*+!#H2'66!  
N\*))60!/(1!)20!, 0/0+\$05!

| #\*1, \$!#\*170, !L')2!\$#N7\*32'+0!#+\$#!1\*NNO, ![(#1+\*6'\$)\$!\*+, !)210L!)207!  
(#)!(/!)20!1((7!\*!)L'66P!>20![#, 10!H01320, !'+!/1(+)!(/!\*!\$2\*NN%&#\$\$'\*+!/6\*I!  
10/#\$0, !)(!6((4!\*!)20!, 0/0+\$0P!., +, !)20!H(6'30!, (IK \*!DCC6N!N6\*34!  
&())L0'601K+(!6(+!01!\$\*)!'!)20!3(1+01!\$20!2\*, !(33#H'0, !\$'+30!)20!\$)\*1)!(/!  
&#\$\$'\*8\$!)1'\*6!(/!)20!%0\*1!N#)!N\*140, !\*+, !/( \*70, !\*)!)20!7(#)2!\*\$!/\$20!L010!  
'+\$0\*132!(/!N6( (, , P. /)01!/'<0!, \*%\$8!\$'))'+!'+!)20!3\*!0!\$(70!, \*%\$!/(1!DC!  
2(#1\$!\*)!\*!)'70!)20!L(70+!\*HH0\*1!OZ2\*#\$)0, P!9'(60))\*!9(64(<\*#!(+0!(/!)20'1!  
6\*L%01\$!\$\*' , !)20%!L010!NO'+!!) (1)#10, K, 0+'0, !/( (, !\*+, !\*, 00#\*)0!\$600HP-E!

. L\*10!(/!)20\$0!, 0)\*'6\$!NO'+!IH(#+30, !#H(+!N%[(#1+\*6'\$)\$!0\*I01!)(/00, !'+)(!)20!/10+; %!(/!

H1(\$03#)'(+!L2'60!\*)07H)' + ! ! ) (!' + /6#0+30!H#N6'3!(H' + '(+!\$#11(#+, '+!!)20!N\*+, P!!F ')2'+!  
&#\$\$\*'!l)20!10H(1)\$!/1(7!7\*' + \$)10\*7!70, '\*!(#)60)\$!3(+!)1\*\$)0, !\$2\*1H6%!L')2!3(<01\*I0!/1(7!  
)20!N6(I(\$H2010!' + !)20!L\*40!(/!)20!H01/(17\*+30!l\*+, !)20!+\*)'(+\*6!10\$H(+!\$0!(/!&#\$\$\*' + \$!  
H1(<0, !)(!NO!6\*1!06%!\$2\*H0, !\*6(+!!)20!6'+0\$!(/!L2'32!+0L!\$(\$#130\$!)20%\$#N\$31'NO, !)(P!

-9!

. 33(1, '+!!)(!)20!z0<\*, \*!J0+)01!H(66!3(+, #3)0, !'+!v#6%!(/!BCDB!Q\*!7010!-!H0130+)!(/!  
10\$H(+, 0+)\$\_ \$\*' , !)2\*)!)20!L(70+!\$2(#6, !NO!60)!(//!L')2(#)!H#+'\$270+)!l(+6%!D~!H0130+)!  
\$#HH(1)0, !\*!['6!)017!(/!7(10!)2\*+!)L(!%0\*1\$P!?!(\$)!3\*660, !/(1!\*!6'!2)01!H#+'\$270+)!l\*+, !B}!  
H0130+)!\$\*', !)20!L(70+!\$2(#6, !NO!\$0+)0+30, !)(!3(77#+'%)!\$01<'30PR~@!. \$!L0!\$2\*66!\$00!l)20!  
/\*3)(1\$!)2\*)!, 1(<0!H#N6'3!(H' + '(+!)20!3\*\$0!(/!)20!"#\$\$%!&'(!)1\*'6!' + !&#\$\$\*'!)1\*+\$30+, !\*+%!  
\*)07H)\$!)(\$0\*760\$\$6%!3(1106\*)0!(H' + '(+\$!\*+, !, 07(11\*H2'3!+(17\$P!!!

! >(!NO!'+!L')2!l"\*)1\*'132!:'1'66!\*)07H)0, !)(!10'+<'! (1\*)0!\*!3(77(+6%!206, !, 0/0+'\$<0!  
\$)\*+30!\*7(+!l!&#\$\$\*' + !Y1)2(, (Z!NO6'0<01\$!L')2!2'\$!H#N6'3!3(770+)!\$(+!"#\$\$%!&'(!)8\$!  
H01/(17\*+30P!>2'\$!\$)\*+30!2\* <' + ! !H10<'(#\$6%!) \*40+!l(())L')2!Y1)2(, (Z!NO6'0<01\$!' + !)20!  
H(\$)G=(<'0)!0!l, '103)0, !2(L!7(\$)!32#132G! (' + !l!&#\$\$\*' + \$!L(#6, !10\$H(+, !)(!)20!\*3)!'+!  
J21'\$!)20! = \* <' (1!J\*)20, 1\*6P!96\*, '7'1!"#)' + !2\* <' + ! ! (L0, !2'\$!100603)'(+!H1'7\*1'6%!)(!)20!  
3(+!\$01<\*)' <0!Y1)2(, (Z!NO6'0<01\$!L(#6, !, 0/0+, !)20!\*110\$)!(/!)20!N\*+, !l3(770+)'+!l(+!)20!  
\*110\$)!(/!)20!N\*+, !)(!10H(1)01\$!' + !z(+, (+!)2\*)!Q)2010!\$!+()2'+!l!((, !'+!)2'\$P!-!L(#6, +8)!  
10\*66%!6'40)!(!3(770+)!l!N#)!-!l)2'+4!'/!)20!l'16\$!L010!l!60)8\$!\$\*%!l'+!-\$1\*06!l\*+, !'+\$#6)0, !

?#\$'7!2(6%!)0!L0!L(#6,+8)!0<0+!2\*<0!2\*,!)'70!(!,0)\*'+!)207P!T(+0)2060\$\$!-,(+8)!2'+4!  
)20%\$2(#6,!NO![#,!0,!)(!\$0<0106%/!(1!)2'\$P!\#)!)20!'+'6!,03'\$'+!10\$)\$!L')2!)20!3(#1)\$K-!  
2(H0!)20!3(#1)!L'66!,06<01!\*!3(1103)!L066G/(#+,0,!1#6'+!PR~X!!

"#)+'+8\$!\$\*)070+!)\*)07H)\$!(!\*HHO\*\$O!\*\$!7\*+%!!1(#H\$!\*\$!H(\$\$'N60P!w0!/'1\$)!\$O)\$!)20!  
(//3'\*6!H1030,0+)!(/!3(+,07+'+!!)20!7(1\*6!\*+,!106'I'(#\$!\$6'I2)\$!(/!)20!H01/(17\*+30!L2'60!  
+0!603)+'+!)(!70+)'(+!)20!\*+)'G"#)+'+!63(11#H)'(+!70\$\$\*!0!(/!)20!6%1'3\$P!w0!)20+!(H'+0\$!  
)2\*)!)20!N\*+,!\$2(#6,!+(!)1030'<0!)20!7\*Z'7#7!\$0+)0+30!\*<'0L!206,!N%)!20!7\*[(1')%!(/!  
H(660,!&#\$\$\*+\$\$!\*\$!\$00+!\*N(<0P!\%!3(+)!1\*\$)'+!&#\$\$\*8\$!106'I'(#\$!H(6'3'0\$!L')2!)2(\$0!(/!  
-\$1\*06!\*+,!)20!?',,60!y\*\$)\$!#"#)+'+!\$#N)6%\$3(//\$!\*)!)20!<(3\*6!(#)31%!(1!"#\$\$%&'())8\$!/100,(7!  
\*\$\$01)+'+!)2\*)!\*!70\*\$#10,!0!100!(/!H#+'\$270+)!\*\$!\*!10\*\$(+\*N60!10\*3)'(+!)(!20!\*3)P!-+!  
Y3)(N01!BCDE



)1'\*(P!!-+!\*!, (3#70+)\*1%!310\*)0, !)(!7\*14!)20!(33\*\$' (+(!/" #)' +8\$!'Z)'0)2!N'1)2, \*%#20!  
10')01\*)0\$!2'\$!H('\$)' (+!(+!)20!<01, '3)5!Q?%!/ '1\$)!10\*3)' (+!L\*\$!)2\*)!)20%!\$2 (#6, !\*\$4!N06'0<01\$!  
/(1!/(1! '<0+0\$\$!\*+, !)2\*)!L (#6, !2\*<0!N00+!)2\*)P!\#)!)20%!40H)!N#'6, '+! !)!#H#\*+, !\$(!)20!  
L2(60!3\*\$0!0+, 0, !'+!)20!3(#1)!\$6\*HH'+!!)207!L')2!)L(G%0\*1![\*'6!)017\$A!\$(!)2010!%(#!2\*<0!' )P!  
-!2\*<0!+()2'+! !)(!, (!L')2!)2'\$P!!>20%!L\*+)0, !)!\*+, !)20%!I (!)'PR~}!" #)' +!\*6\$(!#\$0, !)20!  
, (3#70+)\*1%!\*\$!\*+!(HH(1)#+'!%)(!3(770+)!(+!)20!?'42\*'6!: 2(, (14(<\$4%)1'\*6A!\$00+!N!  
7\*+%!' +!)20!&#\$\$\*+!(HH('\$)' (+!7 (<070+)!\*+, !)20!' +)01+\*') (+\*6!H10\$\$!) (!H\*'1!L')2!)20!  
"#\$%&!&' (!)1'\*6!Q)(\$%7N(6';0!)20!: 1076'+8\$!31\*34, (L+!(+!, '\$\$0+)PR@C!!>20!\$%7N(6'3!N(+, !

!

>20!, '\$10I \*1, !/(1!)20!\$H'1')!(/!)20!yJw&8\$!1#6'+I!L \*\$!\*+!\*\$\$01)'(+!N%)20!3(#1!)!2\*)!  
, 0/0+, \*+)\$!L (#6, !N0!)10\*)0, !\*+, ![#, I 0, !(+)20!3(#1)8\$!)01 7 \$M\$0))'+I!)20!H1030, 0+)!)2\*)!  
)20!&#\$\$\*+![#\$)'30!\$\$)0 7!'!#+'0#06%) \*'6(10, !)(!)20!+00, \$!(/!)20!3(#+)1%!\*+, !\$2(#6, !+ )!  
\*N', 0!N%)20!1#60\$!L2'32!(#)\$', 0!0+)')'0\$\*)'0 7H!)('7H(\$0!#H(+!)?!? \*+%!&#\$\$\*+!\$!L (#6, !  
10\$H(+, !)(!)20!"#\$\$!&' )!)1'\*6!L')2!\$'7'6\*1!3(+0 7H)!/(1!6'N01\*6!F 0\$)01+!\$0+\$'N'6')'0\$M  
<'0L'+I!)20!\*33#\$\$\*)'(+\$(/!2# 7 \*+!1'1 2)\$!\*N#\$0!\*\$!'7H6%!\*!7 \*\$4'+I!, 0<'30/(1!\*!10\$#11 0+30!  
(/!J(6, !F \*1!H1(H\*I \*+, \*)\*3)'3\$P!

! Y+!(+0!0Z)10 70!(/!)20!\$H03)1# 7M\$( 70!&#\$\$\*+!\$!#N\$31'NO!)(!)20!NO6'0/M<(3\*66!  
0\$H(#\$0, !\*+, !, '\$\$0 7'+\*)0, !N%)20!J\*+\*, '\*+!\*+)'G!6(N\*6'; \*)'(+!+(+GH1(/!)J0+)10/(1!  
&0\$0\*132!(+!|6(N\*6'; \*)'(+M)2\*)!"#\$\$!&' )('\$!, '103)6%N\*340, !N%)20!x=!)\*)0!^0H\*1) 70+)!  
\*+, !L\*\$!#\$0, !\*\$!\*!)(6!)(!#+, 01 7'+0!)20!7 (1\*6!\*+, !H(6)'3\*6!/(#+, \*)'(+\$(/!&#\$\$\*!) (IH\* <0!  
)20!L \*%/(1/(10'I +!03(+ ( 7'3!' +)010\$)\$P!-+!\*+\*1)'360!(+!)\$!LON\$')0M)20!(11 \*+'; \*)'(+!\$\*)0\$!  
)2\*)!

)20!F 0\$)M\*+, !7 (10!\$H03'/'3\*66%M)20!3(1H(1\*)0G/' +\*+3'01!' +)010\$)\$!(/!F \*66!  
=)100)!\*+, !z(+, (+M!\$00!&#\$\$\*8\$!3#110+)!I (<01+ 70+)!\*\$!\*!N\*11'01!)(!+ )!(+6%!  
)20!10)#1+!) (1)20!#+ 7')'I \*)0, !H6#+, 01'+I!(/!)20!&#\$\$\*+!H0(H60!)20%12\*, !  
0+[(%0, !'+!)20!D} }C\$M#N#)!\*!32034!\*+, !N\*6\*+30!' +2'N')'+I!)20'1!20!0 7 (+'3!  
\* 7N')'(+!\$!I 6(N\*66%P!>20!F 0\$)!2\*\$!H1(HH0, !#H!L')2!7 (+0%!\*+, !H(6)'3\*6!  
\$#HH(1!)!20!(HH('\$)'(+!7 (<0 70+)!1( 7!L2'32!#"#\$\$!&' )8!2\*\$!0 7 \*+\*)0, P<sup>8</sup>B!!

>2\*\$!N06'0/!)#1+\$!"#\$\$!&' )!' +) (!\*!/(10'I +!\* 1 0+)!' +!7 #32!)20!\$\* 70!L \*%!)2\*)!\*!N'66!H\*\$ \$0, !  
)21(# 1 2!)20!^# 7 \*!' +!v#6%MBCDB!/(130, !T | Y\$!L (14'+I!' +!&#\$\$\*!) (1, 036\*10!)20 7 \$06<0\$!

---

<sup>8</sup>B!>(+%!J\*1)\*6#33!Q&#\$\$\*8\$!#"#\$\$!&' )8!#=#+)=#HH(1)0, !N%!x=!)\*)0!^0H\*1) 70+)R!J95789(VH6H84<-.(. # 1 # \$)!  
D•MBCDBP!2)H5{ {L L L P! 6(N\*610\$0\*132P3\*{1#\$\$\*G\$GH#\$\$G1' )G\$)#+G\$#HH(1)0, GN%G#\$G\$\*)OG  
, 0H\*1) 70+){EBE}~!

!/(10'I +!\*I0+) \$M@E!, 1\*L'+I!\*)0+) '(+!) (!\*!6\*1I01!7 (<070+)!) (!(#)!H0(H60\$8!/(10'I +!  
3(++03)' (+\$!' +!)20!L \*40!(/!)20!, '<'\$'<0!&#\$\*\$'+!H10\$', 0+)'\*6!0603)' (+P!>20!00#\*)' (+!(!  
(HH('\$)' (+!) (!I (<01+ 70+)!H(6'3'0\$L')2!\$0, ') '(+!(1!' 7 7 (1\*6')%!'\$!\*/0\*)#10!(/!&#\$\*\$'+!  
H(6!)\*3\*6!, '\$3(#1\$0!)2\*)!2\*\$!, (+0!7#32!) (!2'+, 01!)20!N#1I0(+ '+I!(/!\*!3'<'6!\$(3'0)%!/100!/1(7!  
)20!)210\*)'(/!'7H1'\$ (+70+)P!!. +()20!N06'0/#!1\*<')\*'+I!/\*1!'+) (!)20!10\*67!(/!3(+H'1\*3!  
)20(1%#!\$!, 07 (+\$)1\*)0, !N%!\*!)60\*\$!)L (!H0(H60!' +<(6<0, !'+!)20!)1'\*65!)20!6\*L%01\$!/(1!  
96\*, '7'1!" ()\*+84'+#!(+0!(/!)20!' +[#10, !H\*1)'0\$L2(!L(140, !\*)!J21'\$!)20!='<'(1\*\$!\*!\$03#1')%!  
I#\*1, P!^#1'+I!\*'+!)01<'0L#!)20!6\*L%01\$!

! -)!\$A!)2010/(10A+(!\$#1H1'\$0!)2\*)!)20!3\*66!/(1!7\*Z'7#7!H#+'\$270+)!/(1!"#\$\$%&'()!L\*\$!  
)\*40+!#H!N%!\*+\*)'(+\*6'\$)!\*+, !106'I'(#\$(1! \*+'; \*)'(+!'+!&#\$\$'\*A!'+36#, '+!!)L(!<01%!, '//010+)!  
I1(#H\$5!<'I'6\*+)0!Y1)2(, (Z!QJ21'\$)\*+!3#6)#10!L \*11'(1\$AR@-!L2(!NO! \*+!H\*)1(66'+!!)20!\$)100)\$!  
'+!)20!L \*40!(/!)20!"#\$\$%&'()!1'\*6A!\*+, !)20!: 1076'+GN\*340, !S(#)2!^07(31\*)'3!. +)'GM\*\$



/'1\$)!\*!H6\*%!\*N(#!)20!"#\$\$%&'(!)1'\*6!\*!)20!?\$(\$3(L!>0\*)1P, (3M\*+, !)20+!)20!\$(70L2\*)!  
0330+)1'3!, '103)(!(/!)20!|G=H(!)?#\$0#7!(/!y1()!3!. 1)M. 604\$\*+, 1!^ (+\$4(%AQ\*!/(1701!  
H(6)'3'\*+!L2(!#\*++(#+30, !)20!310\*)' (+!(/!2'\$!"\*1)%!(/!z(<08,, !#N%!2(6, '+!#!, 07 (+\$)1\*)' (+!  
'+!\$#HH(1)!(/!"#\$\$%&'(!)'+!L2'32!H\*1)%!\*3)'<'\$)\$!\$L\*7!'!+!\*!/(#+)\*'+!\*)!20!|x?!"\$2(HH'+!!  
30+)01!+0Z)!(!&0, !=0#\*108R^BP!!&-. !T(<(\$)'M\*!&#\$\$'\*+!\$\*)0G1#+!+0L\$(#)60)M', 0+)'/'0, !)20!  
\$)\*0!)060<'\$(+!310L!)2\*)!\*33(7H\*+'0, !)20!\*3)'<'\$)\$!\*\$!T>9AQ\*!H1(GI (<01+70+)!32\*++06!  
4+(L+!/(!')\$!\$3\*)2'+!H1(H\*I\*+, \*!\*)\*)34\$(+!)20!: 1076'+8\$!0+07'0\$M'+36#, '+!!(HH('\$)'(+!



z(1, !2\*\$!3(77\*+, 0, !#\$!)20%!4+(L!L2\*)!7013%!#\$!)20%!4+(L!L2\*)!  
/(11'<0+0\$\$!\*+, !zY9y!\*10^!>20%!4+(L!L2\*)!20!0+, !L2\*)!\$!\* , 00#\*)OPX}!

\\*1\*+(<L2(!\*\$4\$!'+!)20!60))01!)(!NO!, 0/1(340, !'+!H1(0\$)!(/!)20!31'7'+\*6!3\*\$0!\*I\*\*'+\$)!"#\$\$%!  
&'()M'\$!H\*1)!(/!\*!\$7\*66!N#)!+()30\*N60!7(<070+)!L2'32!\$(70!' +!&#\$\$'\*!2\*<0!3(7H\*10, !)(!  
)20!"1(0\$)\*+)!&0/(17\*)'(+P!>20!7(<070+)!'\$!32\*1\*3)01';0, !N%!1(L'+!!, '\$3(+0+)!'!+)20!  
Y1)2(, (Z!3(77#+'%)!L')2!)20!J2#1328\$!60\*, 01\$2'H!\*+, !\*, 7'+'\$)1\*)'(+M\*33(7H\*+'0, !N%!  
3\*66\$!/(!7(, 01+';\*)'(+!\*+, !\*!7(10!=31'H)#10GN\*\$0, !\*HH1(\*32)!(!106'I'(+P^C!-+!BCDDM^\*/)01!  
<0+)'+!!)20'1!1'0<'+30\$!L')2!)20!Y1)2(, (Z!J2#132M!)2100!H1'0\$)!\$!\$0!)!20!0Z\*7H60!/(!  
\\*1\*+(<!)(!6\*)01!/(66(L!N%!NO'+!IQ, '\$2(+ (1\*N6%! , '\$3\*110, R^D!'+!)20!3')%!(/!-; 20<\$4P!!='+30!  
)20+M!0+3(#1\*10, !N%)20!, 0<06(H70+)!\$(/!)20!"#\$\$%&'()!)1\*6M+#701(#\$!N6(1!01\$!  
\$#HH(1)'<0!(/!10/(17\$!2\*<0!0+)010, !)20!/1\*%!(/!106'I'(#\$, '\$3(#1\$0M!3(+)'N#)'!+)!)20!  
H0130H)'(+!)2\*)!\*!\$32'\$7!'\$, 0<06(H'+!L')2'+!)20!J2#132P!

>(!\*!6\*110!, 0!100M!)20!(H'+'+\$!(/!)20!&#\$\$'\*+!H#N6'3!3(110\$H(+, !L')2!)20!+0L\$!  
\$(#130\$!)20%)1#)\$!\*+, !\$#N\$31'NO!) (P!M1(7!)20!J21'\$!)20!='<'(1!H01/(17\*+30!(+L\*1, M!  
, '\$3(#1\$0!\$#11(#+, '+!!"#\$\$%&'()!L\*\$!32\*1\*3)01';0, !N%!<'\$#\*6!70\*+\$!(/!, 0(6(1'3\*6!  
)1\*+\$7'\$\$(+P!M'670, !1\*66'0\$M!)20!#\$0!(/!<'\$#\*6!%7N(6\$!\$#32!\*\$!)20!N\*6\*36\*<\*!'+, !)20!31(\$\$M!  
\*+, !H2( (11\*H2\$!(/!36\*\$20\$!NO)L00+!H1(0\$)01\$!\*+, !)20!Y?. T!1'()!H(6'30!3(#6, !0#'346%!NO!  
1060\*\$0, !)(!)20!H10\$!L')2!6')60!\*33(7H\*+'%'+!!\*+\*6%\$!\$P!-+!H(\$)G=(<'0)!&#\$\$'\*!M!2(L0<01M\*!  
\$)\*14!, '\$)' +3)'(+!0Z'\$)!NO)L00+!)060<'\$0, !+0L\$!\*+, !)20!3(+)' +#\*66%! , 0<06(H'+!!  
N6(I(\$H2010P!>20!+#\*+30\$!(/!)2'\$!' , '(\$%+31\*)'3!106\*)'(+2'H!\*10!0ZH(#+, 0, !N%!=\*1\*2!Y\*)0\$!  
\*+, !|'66'\*+!?'3J(17\*345!

---

X)! = 0110%\\*1\*+(<M!Q•c•s' cgp!



%>20!&#\$\$' \* + / (3# \$! 1 (#H!H\*1)'3'H\*+) \$\$!L010!\*L\*10!)2\*)!7#32!(/!)20!+0L\$!  
10H(1)' + I!(+!\$)\*O!)060<'\$(+!'!\$0603)'<O!# + N\*6\* + 30, !(1!N\*\$0, A!N#)!7\* + %!(/!  
)207!<'0L0, !)2\*)!\*\$!\*HH1(H1'\*)OPI!w\* <' + I!6' < 0, !)21(#I2!)20!03(+ (7'3!\* +, !  
H(6)'3\*6!32\* (\$(/!)20!D} }C\$A!)20%!H6\*30, !6')60!<\*6#0!(+!L', 0G1\* + I' + I!H(6)'3\*6!  
, '\$3#\$\$' (+PI!>20%!<'0L0, !H#N6'3!, ON\*)O!\*\$(/!)0+!60\*, '+I!)!(H((1!H(6'3%!\* +, !  
03(+ (7'3!32\* (\$PI! ? \* + %!(/!)20!10\$H(+, 0+)\$!7\*, 0!360\*1!)2\*)!)20%!N06'0<0, !)20!  
1(60!(/!\$\*)0G1# + !)060<'\$(+!L\*\$!)!(H1(<', 0!30+)1\*6!\*#)2(1)'%!\* +, !(1, 01!' +!  
)1(#N60, !)'70\$PI!>2'\$!OZH6\*' + \$!L2\*)!7'I2)!\$007!\*!H\*1\*, (Z5!&#\$\$' \* + !3!); 0 + \$!  
\*HH0\*1!)(!4 + (L!)2\*)!\$\*)0G1# + !)060<'\$(+!0\$0+)'\*66%!/#+3)'(+!\*\$!\*!  
H1(H\*I\* +, \*!7\*32' + 0!/(1!)20!\*#)2(1)'0\$A!N#)!20%!(/!)0+!\*HH1(<0!(/!)2'\$!\*\$!  
)20%!<\*6#0!(1, 01!( < 01!, 07 (31\*3%P\*B!

>2'\$!H\*1\*, (Z!7\* + '/0\$)0, !)\$06/!' + !7#32!(/!)20!\$\*)0G)060<'\$(+!\*#, '0+30!\* , (H)' + I!)20!

3(+ \$01<\*)' < 0!<'0L!(/!)20!" #\$\$%!&' (!)1'\*6A!' + !6' + 0!L')2!)20!N06'0/\$!(/!)20! ? (\$3(L!

"\*)1'\*132\*)O!L2'60!/(66(L01\$!(/!' +, OH0+, 0+)(1!\$(3'\*6!70, '\*!/00, \$A!#32!\*\$!z' < 0v(#1+\*6!

N6(I\$!\* +, !94(+)\*4)O!2\*, !\*!2'I201!)0+, 0+3%!(!\* , (H)!\*!7(10!6'N01\*6!\$)\* + 30PI!F')2!)060<'\$(+!

\$H(\$!\*)!\*!H107'#7!/(1!(HH('\$)'(+!H01\$H03)'<0\$A!\$#HH(1)01\$!(/!' #\$\$%!&' (!)A!L20)201!(1!+ (!

)20%!N06(+I0, !)(!)20!(HH('\$)'(+A!/(#+, !)207\$06<0\$!3(+/' + 0, !)(!)20!-+)01+0)!'+!)20'1!\$0\*132!

/(1!6'40G7'+, 0, !(H'+'+\$P

\$'7H6O!)1\*+\$H\*10+3%!\*+, !/100!0603)'(+!\$!L'66!3#10!\*66!(/!&#\$\$\*8\$!'66\$P!!>21(#!2!  
, 07(+)\$1\*)'(+!\$!\*+, !\*3)\$!NO+)!(+!\$2(34'+!!)20!H#N6'3!(#)!(/!3(7H6\*30+3%!)20%!H1()0\$)!  
\*!\*'+\$)!)0)20!, '\$31'7'+\*)'(+!(/!\$0Z#\*6!7'+(1)!'0\$!\*+, !)20!\*+)!'G! \*%!6\*L!0Z36#, '+!!, '\$H6\*%\$!(/!  
2(7(\$0Z#\*6')%)2\*)!3(#6, !#\$HH(\$0, 6%!'!/#0+30!32'6, 10+]!)20!I 0+01\*6!, %\$/#+3)'(+!(/!)20!  
0, #3\*)'(+!\$!\*+, !20\*6)23\*10!%\$)07\$]!\*+, !)20!I 1\*, #\*6!\$03#6\*1';\*)'(+!(/!)20!J2#132!)21(#!2!')\$!  
N#\$'+0\$\$6'40!N02\* <'(1PR\*V!!>20'1!', 0(6(1%!'\$!N1(\*, !\*+, !3(7H60Z!N#)!\*6\$(!#+%06, '+!'+!)20!  
/\*30!(/!H#N6'3!31')3'\$7!/1(7!N()2!)20!&'!2)!\*+, !)20!z0/)P!!-)!'\$!N03\*#\$0!(/!)20'1!  
#+3(7H1(7'\$'+!A#+6H(H#6\$)!\*!0+, \*A!\*+, !)20'1!L'66'+!+0\$\$!)(!#\$N<01)!6(+!60\$)\*N6'\$20, !  
3#6)#1\*6!+(17\$A)2\*)!(HH(\$)'(+!60\*, 01\$!6'40!. 60Z0%!T\* <\*6+%!2\* <0!, '\$)\*+30, !)207\$06<0\$!  
/1(7!'#\$\$\$!&'()P!!-+!2'\$!10\*3)'(+!)(!)20!J21'\$!)20!\*= <'(1!H01/(17\*+30!20!\$\*)0\$5!0-\$007!)(!  
2\* <0!7'\$0\$, !)20!'+'\*6!I (\*6!(/!)20!L2(60!H1()0\$)!\*3)'(+P!!=(70!H10/01!3\*66'+!!)!)\*!H'030!(/\*1)P!!  
-8, !1\*)201!32\*1\*3)01'; 0!)20'1!H01/(17\*+30!\*\$!\*!7'\$)OHAR!L2'60!Y60I!: (;6(<\$4%A!\*+())201!

\*33(#+)\*N'6')%!L066!\*N(<0!\*#)2(1')\*1'+\$7!(+!)20!6'\$)!(/!)20!3(#+)1%8\$!N'!|0\$)!  
H1(N607\$P!!. !^0307N01!BCDC!z0<\*, \*!H(66!/(#+,!)2\*)!7(10!)2\*+!2\*6!(/!  
&#\$\$\*+!\$H10/01!6\*L!\*+, !(1, 01!0<0+!'!')!3(70\$!\*!)!20!0ZH0+\$0!(/!\$(70!  
, 07(31\*)'3!1'!2)\$P\*@!

>20!(HH('\$)')(+8\$!60\*, 01\$2'HA!'!')\$!0//(\$!)(!1(L!)20!7(<070+)8\$!H(6)'3\*6!'!+/6#0+30A!(H)0, !  
/(1!\*+!\*66'+36#\$'<0!\*HH1(\*32!L')2!)20!(\*6!(/!(\$!)01'+!1\*!<'N1\*+)!3'<'6!\$(3'0)%!)2\*)!3(#6, !  
H#\$2!/(1!\*33(#+)\*N'6')%!\*+,!)1\*+\$H\*10+3%!'+!)20!I(<01+70+)!)(!60+,!7(10!H(L01!)(!)20!  
<()'+!H#N6'3P!>21(#!2!0+3(7H\*\$'+!I!0<01%N(, %!/1(7!6'N01\*6\$)!(!1'!2)'\$)\$A!+\*)'(+\*6'\$)\$)!(  
\(\$20<'4\$A!\*+, !0+<'1(+70+)\*6!\*3)'<'\$)\$)!(!\*+\*132'\$)\$A!)20!7(<070+)!\$(#!2!)!(IN\*6'+30!')\$!  
3(7H('\$)')(+!\*+,!\*32'0<0!\*!, '<01\$0!/(66(L'+!I!/(1!\*!106\*)'<06%!7(, 01\*)0!H6\*)/(17P!>20!  
7(, 01\*)0!+\*)#10!(/!)20!7(<070+)!L(#6, !H1(<0!)(!NO!\*!)20!1(())!(/!)\$!\$#330\$A!\*\$!Q)20!7(\$)!  
, <01\$\*1'\*6!3'<'6!\$(3'0)%!!1(#H\$!)0+,!)(!NO!)20!60\*\$)\$!\$#330\$\$/#6P!>2'\$!\$!+()![\$\$)!\*!10\$#6)!(/!  
\$\*)0!10H10\$\$'+!IN#)!NO3\*\$#\$0!N1(\*, !\*+)'!I(<01+70+)!H1()0\$)\$!0+, !#H!\*6'0+\*)'+!I!(<01+70+)!  
6(%\*6'\$)\$A!L2(!107\*'+'!\$)1(+!17\*[(1')%!(/!)20!H(H#6\*)'(+PR\*!>20!3((H01\*)'(+!(/!)20\$0!

)20!' +00#')'0\$!' +!)20!&#\$\$ '\* +![#)\$'30!\$%)07!)2\*)!H6\*I #0, !(HH('\$)' (+!60\*, 01\$!\* +, !  
H\*1)'3'H\* +)\$!/1(7!)20!\$)\*1)!\* +, !\$20, !6'! 2)!(+!)20!\$\*31!/'30\$, 07\* +, 0, !(/!, '\$\$0+)01\$P!M07\*60!  
\*3)'<'\$)\$!0\$H03'\*66%!7()201\$!6'40!. 6%(42'+\*!\* +, !>(6(4(++'4(<\*!L010!(/)0+!)\*110)0, !'+!  
H\*1)'3#6\*16%!, '\$H'1')'+!L\*%\$!/(66(L'+!!)20'1!\*110\$)\$!(1!' +<0\$)'I\*)'(+ \$!NO'+!!)210\*)0+0, !  
L')2!6('\$'+! !3#\$)(, %!(/!)20'1!32'6, 10+!\* +, !2\*<' +!!)20'1!\$OZ!6'<0\$!H#N6'36%!\$31#)'+'; 0, !\* +, !  
3(+, 07+0, P!?!\*1'\*!\\*1(+(<\*! \* +!\*3)'<0!(HH('\$)' (+!/'! #10!\*!)20!)'70!(/!)20!' #\$\$%!&'(!)1'\*6!

>\*40+!\*\$!\*L2(60M)20\$0!)\*3)'3\$L'06, 0, !N%!20!! (<01+ 70+)\*! \*'+\$)/07 \*60!(HH(+0+)\$!\$0+, !  
\*!70\$\$\*10!)2\*)!)20!\*#)2(1)'0\$!\*10!7 (10!)2\*+!L'66'+I!)(!OZH6('!)!1\*, ')'+\*6!I0+, 01!1(60\$!'!+!  
H10\$\$#1'+I!)20!L(70+!)(!\*N\*+, (+!)20'1!3\*#\$0\$M'L')2!H01\$(+\*6!\$2\*7'+I!\$01<'+I!)20!, #\*6!  
H#1H(\$0!(/!) \*1+'\$2'+I!)20!10H#)\*' (+!(/!)20!' +, '<', #\*6!'+!)20!/\*30!(/!6\*1!06%!3(+ \$01<\*)'<0!  
\$31#)' +%!\*+, !107'+, '+I!()201!L(70+!(/!)20!3(+ \$00#0+30\$(/!(66(L'+I!\$#')P!!!

! >20!I (<01+ 70+)\*#)2(1)'0\$!L010!+ ()M2(L0<01M)20!(+6%!0+)'0\$!#1!'+I!3(+/(17')%!  
L')2!)1\*, ')'+\*6!I0+, 01!1(60\$P!! \$!)20!" #\$\$%&'()!1'\*6!10<0\*60, !/#1)201!, 0)\*'6\$(/!)20'1!  
H6\*)/(17M/(3#\$!L\*\$!10+0L0, !(+!)20!(HH('\$)'(+!7 (<070+)8\$!' +)0+\$0M0<0+!<'(60+)!, '\$, \*'+!

)2'\$!, (#N)!+!\$\*%'+I!(/!)20!7 (<070+)8\$/#)#10!)2\*)!QL0!+00, !\$(70!7 (10!/#06!)(!6'!2!)!20!  
'10!N#)!''#\$\$%&'()!7\*%!2\*<0!2\*170,!)20!(HH('\$)'(+!N%!) \*4'+I!\*L\*%!(70!(/!)\$!7(1\*6!2'!2!  
I1(#+, PR)E!!-)!L(#6, !\$(+!3(70!)(!6'!2!)!2\*)!\$(70!(/!'#\$\$%&'())8\$!N'!1!0\$)!32\*7H'(+!\$!L(#6, !  
NO!/(#+, !\*N1(\*, P!

9-!

-+!)20!L\*40!(/!)20!J21'\$!)!20!='<'(1!H01/(17\*+30M)20!(<01L2067'+I!7\*[(1')%!(/!70, '\*!

\$)100)!H1()0\$)\$P!>20!H1(H0+\$')%!(/!F 0\$)01+01\$!) (!10\*3)!H(\$)'<06%!(!)20!N1\*+, 66'40!+\*)#10!(/!  
)20!"#\$\$%&'(!'7\*10!7(\$)!6'406%!3(+)'1'N#)0,!(!)20!H(H#6\*1')%!(/!)20!1(#HM\*\$!,',!)20'1!  
L', 06%!, '\$3#\$\$0,!!((, !6((4\$P!T\*, 0;2, \*!>(6(4(++'4(<\*M'+!\*+'+)01<'0L!L')2!Jw!L\*\$!0<0+!  
3(\*Z0,!'+)(!3(770+)'+!!(+!)20!1(60!(/!)20!N\*+, 8\$!NO\*#)%!'!+)20'1!H(H#6\*1')%5!

-!2#7N6%!2(H0!)2\*)!(#1!\*)1\*3)'<0+0\$!H01/(17\$!\*!\$#N<01\$'<0!/#+3)'(+P!M'1\$)!  
(/!\*66!NO3\*#\$0!L')2(#)!Q#\$R!'!N\*6\*36\*<\*\$M[#7H'+!!\*66!(<01!&0,!=0#\*10!L')2!

#11 '+ I!\$#HH(1)01\$!(/!)20!N\* +, !)(!3\*10/#66%!3(+\$', 01!)20'1!10\*\$ (+'+ I!NO/(10!H1(/0\$\$'+ I!)20'1!

/#66!\$#HH(1)!(/



&#\$\$\*!'\$6'40!(+0!N'I!H1'\$(+P!!-+!(1!(#)A!%(!\*10!\*6L\*%\$!#+, 01!\$(70(+0!06\$08\$!3(+1(6PR}X!!  
. 6)2(#I 2!)20!7 ()'<\*)'(+!N02'+, !)20\$0!\$\*)070+)\$!3(#6, !<01%!L066!2\*<0!N00+!)(!H01\$#\*, 0!  
(6, 01A!7 (10!3(+01<\*)'<0G7'+, 0, !&#\$\$\*'\*\$+)\$!(!<'0L!" #\$\$%&!&'()8\$!(//'3'\*6!H01\$03#)'(+!)21(#I 2!  
)20!2'\$)(1'3\*6!60+\$!(/!=)\*6+'\$7A!)20%\$0070, !)(!N0!/ \*1!7 (10!0//03)'<0!\*)!10'+/(13'+I!\*

\$007 ,, [#\$)!1030+)6%)20!3')%!3 (#+3'6!(/" \*1'\$!, '\$3#\$\$0, !)20!\$\$#0!(/!" '<'+!!)20!H\*1)'3'H\*+)\$(/!  
" #\$\$!&' (!)20!)')60!(/!"2 (+ (1\*1%!3')'; 0+\$!(/" \*1'\$P!!. 60Z\*+, 01!=32'H4 (<A\*![(#1+\*6\$)!\*+, !\*!  
32#132!2'\$)(1'+M!\$00\$!)20!/(66(L'+!l6(I'3!'+!)2'\$!, (#N60!\$)\*+, \*1, \$!\*HH1(\*32!(/!)20!" \*1'\$!  
\*#)2(1')'0\$5!)20!2((6'I \*+'\$ 7!)2\*)!, 0\$)1(%\$!&#\$\$\*!'\$!I ((, A!)'\$!, 07 (31\*3%P!\#)!'!/)20!\$\* 70!  
2((6'I \*+'\$ 7!, 0\$)1(%\$!M1\*+30K ')!\$!\*!3 (7H60)06%!, '//010+!)!7\*)01RR<sup>DCD</sup>!=' 7'6\*16%A! | 017 \*+!  
J2\*+3066(1!. +!06\*!?'01406!, '103)6%!0#0\$)'(+0, !"#)'!+!\*N(#)!20!\*HH1(H1'\*+)0+0\$!(/!)20!)L(G  
%0\*1!H1'\$(+!\$0+)0+30!2\*+, 0, !, (L+!)(!. 6%(42'+\*!'+, !>(6(4(++'4(<\*DCB!L20+![#\$)!\*!3(#H60!  
(/!7(+ )2\$!H1'(1\*!)1'(!(/!H1()0\$)01\$!0+)010, !J(6(I+0!3\*)20, 1\*6!, #1'+!!\*!7\*\$#!+!\*!\$2(L!(/!  
\$(6', \*1')%L')2!" #\$\$!&' (!)\*+, !L010!\$#N\$00#0+)6%!\*110\$)0, !\*+, !32\*110, !L')2!0)20!  
, '\$1#H)'(+!(/!100!H1\*3)'30!(/!106'I '(+AR!L2'32!3\*11'0\$!\*!7\*Z'7#7!(/!)2100!%0\*1\$!' +!H1'\$(+P<sup>DCE</sup>!!  
. \$!L0!\$2\*66!\$00!7#)#\*6!'+/6#0+30\$!NO)L00+!" #\$\$!&' (!)\*+, !'+)01+\*)'(+\*6!H1()0\$)!  
7 (<070+)\$!\$#32!\*\$!Y33#H%!F \*66!)=100)!\*+, !MO70+M2\*<0!\*6\$(!3(+ )1'N#)0, !)(!)20!

10/#\$0!3(7H1(7'\$0!\*!)20!0ZH0+\$0!(/!(+08\$!H01\$(+\*6!\$\*/0)%!(1!, '6#)0!)20!H(L01!(/!)20!  
'+, '<', #\*6!\*\$!\*!)((6!\*I\*'+'\$)!)20!'+'\$)')#)'(+\$(/!)20!\$\*)0P!!--!)20!L\*40!(/!)20!)1'\*6!"#\$\$%&'(!  
\*+, !)20!(HH('\$)'+!7 (<070+)!L010!N()2!H6\*I#0, !L')2!2\*1, \$2'H\$!L')2!'+'+)010\$)!L\*+'+I!\*\$!  
&#\$\$\*!\*+, !)20!L(16, !3\*70!)(!!1'H\$!L')2!"#)'+'8\$!)2'1, !H10\$', 0+)'\*6!)017P!. /)01!. 6%(42+'\*!  
L\*\$!\$0+)!)(!)20!:-:

/'67\$A!\*\$!L066!\*\$!\$2(L\$!\*+, !3(+301)\$PR<sup>DCX</sup>! = \* 7 #)\$0<'32!'\$!3#110+)6%!'!2)' + !!)20\$0!0//(1)\$A!  
\$)\*'+15!

F 0810!\* I \*'+\$)!3(7 7 013'\*6!/(17\$A!\* I \*'+\$)!7#\$'3!\*\$! I ((, \$P!-)8\$!(#1!H1'+3'H60, !  
H(\$)'+!)(!H#)!(#1!L(14!(+6%!(+!(H0+!\$(#130\$K S(#>#NOM!9: (+)\*4)OK



/07'+ '\$)! , '\$3(#1\$0!'+ , !2\* <0!\$2(L+!6'))60!\$'I +!(/!/\*)'I #0P!!F 20)201!(1!+ ()!M070+8\$!H1()0\$)\$!  
2\* <0!)20!H(L01!) (!\*//03)!70\*+'+I /#6!'+ , !6\*\$)' +I !32\*+I 0!\$!#+360\*1!N#)!20!3(+ )1(<01\$%!\*+ , !  
, ON\*)0!)2\*)!2\*\$!\$#11(#+ , 0, !)20!I 1(#H!2\*\$!%'06, 0, !3(+ \$)1#3)'<0!, '\*6(I #0!\*N(#)!/07'+ '\$ 7!  
L(70+8\$!1' I 2)\$!'+ , !7(1\*6')%!' +!)20!)L0+) %G/'1\$)!30+)#1%P!!" #\$\$%&'()!2\* <'+ I !H10<' (#\$6%!  
(33#H'0, !)2'\$!' +/6#0+)'\*6!H('\$)'(+!' +!)20!70, '\*!2\*\$!, 07(+ \$)1\*)0, ![#\$)!2(L!H(L01/#66%! \*!  
L066G)'70, !L066G3(+ \$)1#3)0, !\*3)!(/!, 0/'\*+30!\*+ , !3(#1\* I 0!3\*+!\$2\*40!)20!L(16, P!!F 20+!\*+ , !  
L2010!)20!+0Z)!7\*[(1!0#\*40!L'66!2\*HH0+!107\*' +\$!) (!NO!\$00+P!

!

!



\0++0))\$A!>? \*13P!!Q-+!" #)' +8\$!&#\$\$\*Az'))60!=OH\*1\*)' (+!\0)L00+!J2#132!\*+, !=)\*OPR!! -H(  
Q86-GLO.5L(I G; H63(• {DE{BCDBP!!  
2))H5{{LLLPL\*\$2'+I)(+)'70\$P3(7{+0L\${BCDB{\*#I {DE{H#}' +G1#\$\$\*G6'})60G  
\$OH\*1\*)' (+G32#132G\$)\*}O{€H\*IO, \*66!

!

\0++0))\$A!>? \*13P!!Q&#\$\$\*'+!" \*16'\*70+)!. HH1(<0\$!T | Y!M(10'I +!. I0+)\$8!z\*LPR!VSU(f5e56.63(  
X{@{DBP!!2))H5{{0+P1'\*+P1#{1#\$\$\*{BCDBCXC@{DXVVE@}}EP2)76!!

!

!

\0++0))G=7')2A?010, ')2P!!Q>(H60\$\$!MO70+!. 3)'<'\$)!w\*'6!" (H08\$!&0\$I +\*)' (+A=2(#)!T(!  
?(10!w(7(H2(NO8!' +!T()10!^\*7OPR!T: iiGLO.5L(N56.3(B{DB{DEP!!  
2))H5{{LLL2#/' +I)(+H(\$)P3(7{BCDE{CB{DB{)(H60\$\$G/070+G\*3)'<'\$)\$G2\*'6GH(HO\$G



y6, 01A!?'1'\*7P!Q&#\$\$'+!0603)'(+5!H(6'30A!)1((H\$!\*+, !%(#)2!11(#H\$!\$)'/60!\*+)'G''#)' +!H1()0\$)\$PR!  
I -H(J: 84K68L3DB{@{DDP!!2))H5{{L L L P I #\*1, '\*+P3(P#4{L(16, {BCDD{, 03{C@{1#\$\$'+G  
0603)'(+6\*+)'GH#)' +GH1()0\$)\$!

!

y1070+4(A. 60Z0%P!QY1)2(, (Z!&\*, '3\*6\$!M'+, !#|G=H()8!' +!?'(\$3(LPR!VSU(F5e56.G3((•{B}{DBP!!  
2))H5{{0+P1'\*+P1#{1#\$\$'\*{BCDBC•B}{DX~-~CDVE•P2)76!

!

QMO70+!. 3)!'+!)20!J\*)20, 1\*6K M10+32!"(6)'3'\*+\$!' +!M#1%K ='7'6\*1')'0\$!)(!"#\$%&!&'()PR(I -H(  
F56<H(5i(V: 66683(B{BC{DEP!!2))H5{{0+16'\$2P1#<1P1#{BCDE•CB•BC{MO70+G\*3)G'+G)20G  
3\*)20, 1\*6GM10+32GH(6)'3'\*+\$G'+G/#1%G\$'7'6\*1')'0\$G)(G"#\$%G&'()!

!

QMO70+!. I '\*+\$)J2#132!\*+, !?'66'(+\*'10\$AR!kL0%6-(V: 66683('(\$)0, !DB}{DD!N%!Q(4V#BN#RP!

z'))\*#01A!^\*+P!Q"1(G^07(31\*3%!&#\$\$'\*+!?(<070+)!&0[03]\$!z|\>! 3)'<'\$)\$PR!J8YM.84fH263((  
DB{EC{DDP!!2))H5{{L L L P I \*%\$}\*1+0L\$P3(7{\*1)'360{H1(G, 07(31\*3%G1#\$\$'\*+G  
7(<070+)G10[03]\$G6I N)G\*3)'<'\$)\$!

!

z(N;'+'\*#. 6'+\*P!QY1)2(, (Z!. 3)'<'\$)\$!J10\*)0!?((\$3(L!"\*)1(6!=0#\*, \$PR!I -H(P56<52(fH263((  
•{BB{DBP!!2))H5{{}}207(\$3(L+0L\$P3(7{6(3\*6{BCDBC•BB{D}CDBB•EBP2)76!

!

?\*340%#&(N01)P!Q. /)01!"#\$\$%&'(!)901, '3)A!J21'\$)\*+!J#6)#10!F \*11'(1\$!&#+!&'(!)'!+!?((\$3(LPR!  
I -H(WHKH,(fH2(g54h(I G; H6P!!•{EC{DBP!!  
2))H5{{}}2060, OPN6(I \$P+%)'70\$P3(7{BCDB{C•{EC{/ (66(L'+I GH#\$\$%G1' )G<01, '3)G  
321'\$)\*+G3#6)#10GL \*11'(1\$G1#+G1' )G'+G7(\$3(L{!

!

0?0, '\*!J(<01\*I 0!(/"#\$\$%&'(!)>1\*6!&0\$)1'3)0, !\%!J(#1)PR!VUNMS(V: 6668L(WHO89(SLi54; 8.65L(  
UOHL<Y3



&()2! . +, 10L!\*+, !&(N01)!? \*340%!Q&#\$\$\*!. \$\$'I+\$!\(, %I#\*1, \$!)(lv#, I0!. 20\*, !(/!901, '3)!'+!  
" #\$\$%!&'(!>1'\*6PR!! -H(FH2(g54h(I G; H63(•{D@{DBP!!  
2))H5{{2060, OPN6(I \$P+%)'70\$P3(7{BCDB{C•{D@{1#\$\$\*G\*\$'\$I+\$GN(, %I#\*1, \$G)(G  
[#, I0G\*20\*, G(/G<01, '3)G'+GH#\$\$%G1'())G1'\*6{!!

!

Q&#\$\$\*'+!"#+4!\\*+, !" #\$\$%!&'(!| (!(+!w#+I01!=)1'40!'!+? (\$3(LPR!! -H(QHHh3E{@{DBP!  
2))H5{{L L L P)20L004P3(P#4{1#\$\$\*{1#\$\$\*G0603)'(+{V~XBB{1#\$\$\*+GH#+4GN\*+, G  
H#\$\$%G1'())G1(G2#+I01G\$)1'40G7(\$3(L!

!

=\*7#)\$0<'32!S04\*)01'+\*P!(-)01<'0L!N%!? '1'\*7!y6, 01P!QS04\*)01'+\*!\*=\*7#)\$0<'325!#F 0!J\*+8)!  
"01/(17!L')2!=#H01\$)\*1\$PR!! -H(J: 84K68L3(DB{BC{DBP!!  
2))H5{{L L L P! #\*1, '\*+P3(P#4{7#'\$3{BCDB{, 03{BC{%04\*)01'+\*G\*\$7#)\$0<'32GH#\$\$%G  
1'())G\$#H01\$)\*1\$!!

!

=32(0+N01!A!=2'1\*P!Q"1(Gz'/O!F ')2!yZ30H)'(+!M(1!&\*HO!-+30\$)A!\*+, !y701!0+3%PR!

># 7\*+(<N|1'I(1%P!Q>20!^\*14!^('+I\$!(/!&#\$\$'\*8\$!JO+)10!yPR!m/HL(j H; 5<48<Y(V: 66683(  
•{B•{DBP!!2))H5{{LLLP(HO+, 07(31\*3%P+0){C, G1#\$\$\*{11'I(1%G)#7\*+(<{,\*14G  
, ('+I\$G