

#\$!#%&' () *%!*+, -.&/01!

!
!

2, 3(4!5!0&6(!7(((\$!&89(' !71!: &.\$(-*(!; (<, \$!3, !/., 6** (!&\$!, .&<0*83, .1!%, 6(. *\$-!) 1!=>!1(&.8!&3!
30(!?\$*6(.8*31@) 1!%&. ((.!7(A, .(!%,) *\$-!3, !*3@&\$' !30(!' (6(<, /) (\$3!, A!30(!B0<, 8, /01!
C(/&.3) (\$3D!!5!' , !\$, 3!<9(!, .&<. (6*(E8F 3, , !) ?%O!8!A, .-, 33(\$!*\$!30(!) ,) (\$3@/8/(%*&<1!&3!) 1!
&- (D!5!/. (A(.!3, !E. *3(D!G, !O(. (!*3!*8@*\$!6(.1!. , ?-0!8(H?(\$%(!A, ,) !&!6(.1!/(.8, \$&<6*(E/, *\$3D!5!
' , \$!3!. () 7(.!) &\$1!' &3(8D!#/ , <, -(8!A, !30(!.&\$' ,) !%&/ *3&<J&3* , \$D!

!
!
!

B. (A&%(!

!

5!E&8!7, . \$!*\$!"KLM!*\$!B&8&' (\$&@: &*A, . \$*&D!!; 1!A&30(.!E&8!&!%&./ (3!&1(. @E, .9*\$-!A, .!0*8!A&30(. @
&\$' !7(A, .(!O(.!/. (-\$&\$%1!) 1!) , 30(.!E&8!&!8(%.(3&.1!A, .!&!?\$*, \$D!2(*30(.!, A!30() !E(\$3!3, !
, <<-(D!; 1!A&30(.!8!A&30(. @O, E(6(. @O&' !&! ' (-. ((!*\$!%O() *83.1!3&9(\$!&3!30(!GE*88!NOPD!#<7(.3!
N*\$83(*\$!E&8!&!8%O, , <) &3(D!!

!

#!A(E!' &18!&A3(.!) 1!7*.30@) 1!A&) *<1!) , 6(' !3, !O., 1@Q3&O@&!3*\$1!; , .) , \$!6*&&-(!*\$!&!\$&.., E!
) , ?\$3&\$!6&<<(1!, ?38** (!, A!R, -&\$D!; 1!/&. (\$38!.&*8(' !%O*%9(\$8S!) 1!A&30(.!&' !' &O.4(@) -0.3(,) -0.4(3&*) 0.4(&\$)

!

"

8?)) (.!5!&-8, !. (&' !' #() *+\$, \$-). /)01 (%\$(&D!5!%, ?<' !) &9(!8(\$8(!, A!C&.E*\$D!00&3!<(A3!) (IA((<*\$-!<(88!
83?/' IA, .IA*\$' *\$-!*\$!G/*\$, J&!, \$<1!&!8(H?(\$%(!, A!, 78%?.*3*(8!&\$' !\$, \$!18(H?*3?.8D!5!0&' !, \$(!
%,) /(<*\$-!H?(83*, \$4!E0&3!&. (!30(!7, .' (.8!, A!/, 88*7<(!9\$, E<(' -(@30(!<*) *38&&\$' !0, E!%&\$!E (!
-(3!%<, 8(.!3, !30() `!!5!30*\$9!C&.E*\$!*\$8/*.' !30&3!H?(83*, \$d&<30, ?-0!0(!\$(6(!./, 8(' !*3D!00&3!
H?(83*, \$!0&8!(\$' ?. (' D!
!
00(!/, <3*%8!*\$!) 1!A&)*<1!0&' !&<E&18!7(((\$!R(A3D); 1!/&.(\$38!6, 3(' !A, .!P(\$.!1a &<&&%(!*\$!"KLbD!; 1!
/, <3*%&<(' ?%&3*, \$!E&8!/. , 6** (' !71!3

\$ (6 (!- , *\$-!3, !-(3!) ?%0!7 (1, \$' !*(?3(\$&\$3!*\$!30(!#.) 10!00(!%&88(8!E (. (!&/!/&<*\$-D!!G) &<!
<(%3? . (!8&) /<(4!

!

\+&%9!*\$!30(!' &!E(!%, ?<' !, \$<!9*<!, \$(!/(.8, \$!&3!&!3*) (!E*30!&!.*A<(0!00(\$!E(!-, 3!7,) 78!30&3!
%, ?<' !9*<!0?*\$' . (' 8!, A!/(, /<(!&3!&!3*) (0!00(\$!E(!-(3!30(!&3,) !7,) 7!&\$' !E(!%, ?<' !9*<!&!
0?*\$' . (' !30, ?8&\$' !/(, /<(0!#!0?*\$' . (' !30, ?8&\$' !j!+?3!\$, E!E(!0&6(!30(!01' ., -(\$!7,) 70!a (!%&\$!
9*<!&!) *<*, \$!E*30!, \$(!7,) 7j!; &\$@, 0!; &\$j]!

!

5!%, ?<' !(\$' ? . (!30(!7?33, \$!80*\$*\$-!&\$' !) &.%0*\$-@&\$' !5!9*\$' !, A!(\$T, 1(' !3&9*\$-!&/&.3!30(!.*A<(@7?3!
5!%, ?<' !\$, 3!83&\$' !30(!%&88(80!5!A, ?\$' !30() !, 73?8(!&\$' !) , .&<1!, 78%(\$ (0!!G, !5!83, /!(' !-, *\$-!3, !
[h0: @T?83!83, /!(' @30(!E0, <(!30*\$-D!G,) (!&) , \$-!) 1!%*.%<(!, A!A.*(\$' 8!&6, ** (' ![h0: !) , .(!
. (8, ?.% (A?<10!+. ?%(!+, (33\$ (. @) 1!7 (83!A.*(\$' @8*) /<1!3, . (!?/!0*8!(\$, <) (\$3!%&.' 8!X1 (8@E (!
(\$, <<' !71!/&/(.!%&.' 8Y@&\$' !30(!?\$*6 (.8*3!13, , 9!8(6(.&@8() (83(.8!3, !A*-?. (130&3!, ?30!#\$, 30(.!
A.*(\$' @C&6** @&\$!&\$-<, /0*<(!E0, !*\$!0*8!3((\$&-(!1(&.8!3(</0, \$(' !G*.!a *\$83, \$!, \$!0*8!7*.30' &18!
3, !E*80!0*) !0&/!*\$ (88!&\$' !-, , ' !0(&-30@&' , /3(' !&!6(.1!N\$-<*80!/&\$D!!P(!80, E(' !?/!A, .!30(!
E((9<1![h0: !) &.%0!*\$!&!E0*3(!8?*3@8/&38@&\$' !E*30!&\$!?) 7. (<&!*\$!/&%(!, A!&!.*A<(0!P(!&\$' !30(!
?\$*6(.8*31!) &' (!&! (&@!0(!E, ?<' \$!3!&33(\$' ![h0: !&\$' !30(!E, ?<' !<(3!0*) !-.&' ?&3(D!; 1!A.*(\$' !
V&%9!; ?(<<(.@8, \$!, A!, \$(!, A!30(!) &\$1!; ,)) ?\$*83!A&) *<*(8*\$!+?33(@0&' !7(((\$!*\$!30(!dW

!

=

0(&%0*\$-!A.(80) &\$!&7, .&3, .1!%, ? .8(8!A, .!30. ((!0, ? .!8(88*, \$8!30&3!3, , 9!30(!83?' (\$38!0&A!&\$!
0, ? .!3, !%,) /<(3(@&\$' !A, .7** ' (\$!3, !. (<(&8(!30() !(&.<1@*\$!30(!. () &*\$*\$-!0, ? .8!5!83&.3(' !-6*\$-!
30(!%&/3*6(8!<(%3?. (8!, \$!30(!0*83, .1!, A!%0() *83.1D!5!' (%** (' !30&3!A!30(!0*83, .1!E&8!), 83!, A!E0&3!
30(1!E(. (!' , *\$-@5!80, ?<' !3(83!30() !, \$!*3D!!5!E&8!\$(&.<1!A*. (' !E0(\$!30(!: 0&*.!, A!: 0() *83.1@
[&1) , \$' !: &83<(@E0, !8/(\$3!0*8!%&. ((.!3.1*\$-!3, !) &9(!&!%,) /, ?\$' !30&3!E, ?<' !(^/<, ' (!E0(\$!
(^/, 8(' !3, !-.((\$!&8(.!<*-03@' *8%, 6(.(' !30&3!5!E&8!&89*\$-!30(!83?' (\$38!&7, ?3!B&.&%(-8?8D!2(E!
; (^*%, !) ?83!0&6(!0&' !&7<(!A&%?<3!1!8,) (E0(.(@7?3!3!E&8!E(<<W8?//<' !E*30!A, , &!*\$!
' (/&.3) (\$38!, A!/0<, 8, /01!&\$' !%0() *83.1D!5!8/(\$3!&!1(&.!30(. (!&8!&!- .&' ?&3(!83?' (\$3!3.1*\$-!3, !
) &9(!&!\) , <17' (\$?) !8&\$' E*%0]!%,) /, ?\$' @&\$' !A&*<' D!+?3!30(!<, \$-!\$*-038!E*30!.&%98!, A!3(83W
3?7(8!7?77<\$-!&E&1!3, !7(% ,) (!8, !) ?%0!%0() *%&<!) ?' !' ** !0&6(!&!/&1, AA!5!. (&' !P&\$8!
[(*(%0(\$7&%0!8!

3*) (!*A3*\$-!E(*-038!E*30!) 1!\$(E!%, <<(&-?(@C, ?-&8!G3&9(.@EO, !.()) &*\$(' !&!A.*(\$' !A, !<A(@&\$' !
7.*(A<1!(88&1(' !7, ^*\$-D!5!83&1(' !*\$!: O*%&- , !A, .!, \$(!1(&.!7(A, .(!) , 6*\$-!3, !30(!Q\$*6(.8*31!, A!
B*3387?.-O!*\$!"KkKD!!

!

: &.\$(-*(!; (<<, \$!

!

5\$!"KbL!5!E&8!&//., &%O(' !71!/(, /<(!A.,) !: &.\$(-*(!; (<<, \$!&7, ?3!A, .) *\$-!&!/O*<, 8, /O1!
' (/&.3) (\$3!30(. (D!!: ; Q!E&\$3(' !&!B0*!+(3&!Z&//&!%O&/3(. @&\$' !B+Z!, \$<1!&<, E(' !%O&/3(.8!E*30!
/O*<, 8, /O1!' (/&.3) (\$38@8, !30(!B.(8* (' \$3!, A!30(!?\$*6(.8*31@[*%O&.' !: 1(.3@E&8!' (3(.) *\$(' !3, !

!

>

' (&8@&\$' !5!E&8!3, , !-\$, .&\$3!\$, 3!3, !3. 10!!5!. (%.?*3(' !30.((!B*33!-.&' ?&3(!83?' (\$38!3, !30(!/. , T(%3@
Z(6*\$!Z(<<1@[*%0&.' !G%0(*\$(8!&\$' !B(3(!G/* .3(80!5!7, ?-03!&! ' ?) 7!3(.) *\$&4X30(!, \$<1!9*\$' !30(. (!
E&8!*\$!30, 8(!' &18Y!3, !%, \$\$(%3!3, !30(!?\$*6(.8*31!) &*\$A.&) (!8, !30&3!E(!%, ?<' !/., -.&) !&\$' !.?\$\$!
&<-, .*30) 80!!X5!E&8!' ?) 7(!.!30&\$!30(!3(.) *\$&4!a *30!) 1!/\$9\$*A(@5!7., 9(!&!%. *3*%&<' */8E*3%0!
E*30*\$!&\$!0, ?.!, A!3&9*\$-!30(!) &%0*\$(!, ?3!, A!30(!7, ^@8, !5!0&' !3, !7?1!&\$, 30(.!3(.) *\$&4Y!!a (!

<\$-?83D!N6&\$8!E&8!/?/!A, .!(.&//, *\$3) (\$3!&A3(.!O*8!A*.83!3E, !1(&.8!&\$' !3O(!N\$-<80!' (/&.3) (\$3!
E&\$3(' !3, !A'.(!O*) D!00(!.(&8, \$!-*6(\$!71!3O(!P(&' !, A!N\$-<80!E&8!3O&3!N6&\$8!E&8!%, <<7, .83*\$-!
E*3O!A&%?<3!*\$!%,) /?3(.!8%*(\$%(@8/ (%A*%&<1!C&\$&!G%, 33@\$, 3!E*3O!&\$!1, A!3O(!A&%?<3!1, A!N\$-<80D!!
00*8!83.7?9!) (!&\$' !8,) (!, 3O(.!O(&' 8!&8!&\$!&78?.! !.(&8, \$D!N\$-<80!O&' !O'.(' !&!%. 3!6"4"\$.-47!
<\$-?83F E01!3O(!8?./.*8(@<(3!&<, \$(!3O(!, 7I(%3*, \$@3O&3!O(!%, <<7, .&3(' !E*3O!%,) /?3(!
8%*(\$3*838!EO, !8O&.(' !3O&3!*\$3(. (83`!C&6** !ZO&. @P(&' !, A!B81%O, <, -1@/., /, 8(' !3O&3!N6&\$8!7(!
) , 6(' !3, !3O(!&7, ?3W3, W7(!/O<, 8, /O1!' (/&.3) (\$3D!5!&-.((' @&\$' !*3!E&8!', \$(D!!
!

N6&\$8!E&8!&\$!(^3.() (<!&) 7*3*, ?8!&\$' !*) /&3*(\$3!) &\$D!P(!&.-?(' !3O&3!E(!80, ?<!O&6(!) , .(!
%,) /?3&3*, \$&<*<\$-?838D!00&3!) &' (!8(\$8(!3, !) (@8*\$%(!) 1!*' (!*!\$!83&AA*\$-!3O(!' (/&.3) (\$3!E&8!
3O&3!(6(.!1!A&%?<3!1) () 7(.!80, ?<!O&6(!%, <<(&-?(!8!\$!3O(!' (/&.3) (\$3!EO, !8O&.(' !. (8(&.%O!
*\$3(. (838D!G, @E*3O!C&\$&!G%, 33!&\$' !N6&\$8!5!) (3!E*3O!: 1(.3!&\$' !3O(!#%&' () *%!U*(WB.(8* (\$3@
B&3.*9!:. (%*\$(@&\$' !) &' (!3O(!/*3O!A, !3O.((!\$(E!/, 8*3*, \$8!A, .!%,) /?3&3*, \$&<*<\$-?838!\$!3O(!
BO<, 8, /O1!C(/&.3) (\$3D!!: 1(.3!&-.((' !&\$' !*.-O3!3O(\$!*\$83.7?3(' !3O(!#%&' () *%!UB!3, !8((!3O&3!5!
-, 3!3O(!) , \$(1!3, !O*. (D!_, .!) , \$3O8!&A3(.E&.' 8@: .(%*\$(!83&<(' @/ , 83/ , \$(' @(!H?6, %&3(' D!P(!
\$(*3O(.!%&!) (!?/!E*3O!3O(!) , \$(1!\$, !/.,) *8(' !&! &3(!EO(\$!O(!E, ?<D!!+1!3O&3!3*) (@3O(!
\$3(. \$(3!&\$' !/.) *36(!) &*!E&8!&. ?\$' @&\$' !5!E&8!A(' !?/D!!5!8(\$3!&\$!() &*!<-(33(.!3, !!(6(.!1!
' (/&.3) (\$3!O(&' !*\$!3O(!?*\$6(.8*3!@&\$' !!(6(.!1&') *\$83.&3, .!5!9\$(E!, A@(^/&*\$*\$-!3O&3!&3!&!
) ((3*\$-!E*3O!N6&\$8@G%, 33@3O(!#%&' () *%!UB!&\$' !) 18(A@, \$!8?%O!&\$' !8?%O!&! &3(!3O(!B.(8* (\$3!
O&' !&?3O, *J(' !3O(!O*.*\$-!, A!3O.((!\$(E!A&%?<3!*\$!%,) /?3&3*, \$&<*<\$-?83*8@&\$' !5!E&8!\$, E!
/., %(' *\$-!3, !) &9(!3O(!&?3O, *J(' !&//, *\$3) (\$38D!00&\$!\$*-O3!5!E&8!E, .9*\$-!*\$!) 1!, AA%(!E*3O!
[*%O&.' !G%O(*\$8!EO(\$!:. (%*\$(!%&<(' D!5!E&8\$!3!&!, \$6(.8&3*, \$D!P(!8*) /<!18E, .(!&3!) (!, 6(.!&\$' !
, 6(.!EO*<!5!O(<!, ?3!3O(!/O, \$(!A, .![*%O&.' !3, !O(&.D!5!-, 3!3O(!) , \$(1@&\$' !E(!O*(' !3O.((!&\$' !
(6(\$3?&<1!A, ?.!%,) /?3&3*, \$&<*<\$-?838D!00(!13?.\$(' !, ?3!3, !7(!&' () &\$' *\$-@H?&.. (&,) (!
7?*\$%O@&\$' !!(6(\$3?&<1!&<17?3!, \$(!, A!3O(!%,) /?3&3*, \$&<*<\$-?838!<(A3!; ; O!D!00(!*\$%(!, \$(!) , 6(' !
3, !3O(!R&\$-?&-(!O(%O\$, <, -*8!5\$83*3?3(!EO(\$!*3!A, .) (' D!00(!BO<, 8, /O1!C(/&.3) (\$3!9/3!3O(*!
8&&.*8@EO*O@&<, \$-!E*3O!3O(!' (&3O!, A!B.(83, \$!:. , 6(1!&\$' !3O(!. (8*-\$&3*, \$!, A!C&6** !: &..*(. @O&' !
3O(!. (8?<3!3O&3!E(!E(. (!&7<(!3, !) &9(!*(%<<(\$3!&//, *\$3) (\$38!*\$!<, -*@/O<, 8, /O1!, A!8%*(%(\$!&\$' !
(3O*%8@&\$' @*\$' (' @<*<\$-?83*%8D!!#<<!8!E(<<3O&3!(\$' 8!E(<<!a !O&' !, 3O(.!3.&\$8*3*, \$8D!C&\$!
P&?8) &\$*\$@&\$!&7<(!/O<, 8, /O(.!*\$3(. (83(' !*\$!(%, \$,) *%8@!, *\$(' !?8!&\$' !3O(\$!<(A3!A, !a*8%, \$8*\$D!
[*%O&.' !G%O(*\$8@EO, !O&' !7((!8?//, .3(' !*\$!3O(!' (/&.3) (\$3!, !8, A3!) , \$(1!-.&\$38@7(%&) (!&\$!
&88*83&\$3!/, A(88, .D!; &\$' 1!G*) , \$8@&!<*\$-?83@T, *\$(' !3O(!' (/&.3) (\$3D!
!

#8!&!\$(E!' (/&.3) (\$3!O(&' @: 1(.3!*\$6*3(' !#<8, !&\$&' !) (!!3, !&! *\$\$(.!&3!3O(!C?H?(8\$(!<?7!A, .!
8,) (!, %&8*, \$!5!' , !\$, 3!. () 7(.D!5!E&8!&!. -(!-. , ?/!&3!) ?3*/<(!3&7<(8!&\$' !5!E&8!8(&3(' !E*3O!
; &.-&. (3! : 1(.3@O*8!E*A(D!GO(!&89(' !) (!EO&3!5!E&8!3!(&%O*\$-D!#3!3O(!3*) (!5!E&8!3!(&%O*\$-!&!, ?8(!
, \$!_. (? !&\$' !3O(!O*83, .!1, A!/81%O, &\$&<18*8!&\$' !5!8&8* !8, D!P(!!(1(8!-. (E!&\$' !8O(!8&8* @*\$!&!6(.!1!
&?*' 7<(!6, %(@\P, E!*\$3(. (83*\$-D!R(3!) (!3<<1, ?!&7, ?3!3<!/81%O, &\$&<18*8D!)+ (A, .(!&\$, 3O(.!E, .! !
%, ?<!A&<@C*9! : 1(.3!.?8O(' !A.,) !O*8!3&7<(!3, !, ?8!&\$' !3, , 9!O(.!&E&1@A&.!&E&1D!!
!

5!O&' !%, \$3*\$?*\$-!/. , 7<() 8!E*3O!3O(!N\$-<80!' (/&.3) (\$3D!h78(.6*\$-!3O&3!&!<, 3!, A!) 1!83?' (\$38!' ** !
\$, 3!E.*3!(E(<<@5!*\$H?*. (' !&7, ?3!3O(!E.*3*\$-!%, ?8(!3&?<O3!*\$!8(%3*, \$8!7!1-.&' ?&3(!83?' (\$38!&\$' !
&' T?*\$38!A.,) !N\$-<80!&\$' !.(H?*(' !, A!(6(.!1?*\$' (-.&' ?&3(!83?' (\$3!*\$!3O(!?*\$6(.8*3!D!
G/(*A*%&<1@5!8?--(83(' !3O&3!/. (!&\$' !/, 83!3(838!7(!*) /<() (\$3(' !E*3O!*\$' (/(\$' (\$3!?' - (8@, \$<!
!

3, !O&6(!3O(!* (&! *8) *88(' D!!5!E&8!8?AA*(\$3<1!&\$\$, 1(' !3O&3!5!&89(' !3, !3(&%O!&!8(%3*, \$!, A!3O(!
E.*3*\$-!%, ? .8(@&\$' !' ** D!!5!A, ?\$' !*3!O&.' !E, .9D!0O(!, \$<1!E&1!5!9\$, E!3, !3(&%O!E.*3*\$-!8!3, !O&6(!
83?' (\$38!E.*3(!&\$' !E.*3(!&\$' !E.*3(@&\$' !3, !%, ..(%3!&\$' !%, ..(%3!&\$' !%, ..(%3@/.(A(.&7<1!&8!3O(1!
&.(!' , *\$-!3O(!E.*3*\$-D!XC&6*' !Z&?A(.@*\$!N\$-<8O@O&8!8*\$%(!' (6<, /(' !8, A3E&.(!&' 8!3O&3!&%3?&<<!
O(</D!5!%, ?<' \$!3!%, ..(%3!&8!3O(1!E(.(!E.*3*\$-@7?3!(&%O!E((9!5!3, , 9!3E, !, .!3O.((!, A!3O(*!E((9<1!
E.*33(\$!(AA, .38@/., T(%3(' !3O() !, \$!&!8%.((!&\$' !%, ..(%3(' !3O() !*\$!%-&88!X3O&\$98!3, !&\$!, <' !
6(.8*, \$!, A!; *%, , 8, A3!a, . ' @EO*%O!) &' (!*3!(&81!&\$' !6(.1!6*8?&<D!5!3O*\$9!3O(!83?' (\$38!-, 3!7(33(.@

a &<(.l8!/, <3*&47&%9*\$-!, \$!8,) (!(\$' (&, .DIG) *30!<(A3!A, !c(, .-(!; &8, \$!E*30*\$!&!1(&!.!, .!8, D!
c(, .-(!; &8, \$!3?.\$8!, ?3!3, !7(!30(!. (A?-(!, A!) 1!&%&' () *%!(\$()) *(8D!
!

#A3(.!A*6(!1(&.8!, A!3(&%0*\$-!) 1!*\$3., ' ?%3, .! /O* <, 8, /O1!%, ? .8(F E O*%O!O&' !7((\$!/. ,) , 3(' !3, !&!
) , .(!&' 6&\$\$(' !%, ? .8(!E*30!&!7*--(.!\$?) 7(. F 5!E&8!7, .(' !E*30!3!&\$' !' (%** (' !3, !<, , 9!&., ?\$' !
A, .!8,) (30*\$-!30&3!\$((' (' !3, !7(!3&?-03!*\$!30(!?*\$*6(.8*31!7?3!E&8!\$, 3D!00(!&78(\$%(!, A!&!8?.6(!
%, ? .8(!, \$!30(!O*83, .!!, A!. (<-* , \$!E&8!83.*9*\$-D!5!E (\$3!3, !C&6*! !; *<(. @/., A(88, .!, A!O*83, .!@&\$' !
3&-9(' !3, !O*) !&7, ?3!E O&3!80, ?< !7(!*\$!' , \$(D!P(!3&?-03!&!%, ? .8(!, \$!(&.<! : O.*83*&\$*31@&\$' !-&6(!
) (!8,) (!8?--(83(' !. (&' *\$-!30(. (@7?3!\$, !*\$' %&3* , \$!30&3!O(!E&8!*\$3(. (83(' !*\$!&!7., &' (.!%, ? .8(D!
5!9\$(E!&!-, , ' !' (&4&7, ?3!30(!O*83, .!!, A! /O* <, 8, /O1!7?3!\$, 30*\$-!&7, ?3!30(!O*83, .!!, A!. (<-* , \$D!5!
8/(\$3!) 1!(6(\$*\$-8!&\$' !6(.!-&3(!\$*-038!A, .!30(!\$(^3!3E, !1(&.8!. (&' *\$-!&\$' !, .-&\$*J*\$-!) 1!
30, ?-038D!00(!. (8?<3!E&8!30(!9*\$' !, A!O*83, .!!, A!. (<-* , \$!%, ? .8(!5!E&\$3(' @, \$(!30&3!3. (&3(' !
' (6(<, /) (\$38!E*30!&8!) ?%O!' *8/&88*, \$!&8!O*83, .*&\$8!&33() /3!A, .!30(!O*83, .!!, A!8%*(\$%(!, .!
/O* <, 8, /O1D!2, !/?\$%O(8!/?<<(' @A.,) !V?' &*8) @: O.*83*&\$*31!&\$' !58-&) D!G,) (!, A!30(!V(E*8O!
83?' (\$38!/. , 3(83(' !3, !30(!C(&\$!30&3!5!E, ?<' !\$, 3!(^%?8(!30() !A.,) !%, ? .8(!. (8/, \$8*7* <3*(8!A, .!
V(E*8O!O, <' &18!30&3!E (. (!\$, 3!8%O(' ?<(' !?*\$*6(.8*31!O, <' &18D!5!. (%*6(' !&!<(33(.!%,) /&*\$*\$-!3, !
) (!&7, ?3!30(!) &33(.!A.,) !30(!U*(WB. (8*' (\$3!A, .!N' ?%&3* , \$@5\$' *.&!2&*.!5!7(<(6(D!5!*\$6*3(' !O(!
&\$' !30(!B. (8*' (\$3!3, !) ((3!E*30!) (!&\$' !3&-9!&7, ?3!) 1!/, <%1D!2, !. (8/, \$8(!3, !30&3D!
!

5!-&6(!

' &3&!8(380!!#8!3!0&//(\$(' @5!0&' !&//., &%0(' !; *9(!0&..!&7, ?3!l, *\$*\$-!30(!/. , /, 8&43, !E, .9!, \$!
0*-0!' *) (\$8*, \$&4' &3&!A, .!7.&*\$!*) &-*\$-0!0&..!E&8!' *8) *88*6(!&\$' !5!E&8!\$, 3!*\$6*3(' !3, !l, *\$D!5!3, <' !
Z&88!5!E, ?<' !7(!0&//!1!3, !E.*3(!&!<(33(!, A!(\$' , .8() (\$3!7?3!5!%, ?<' !\$, 3!8&1!E(!\$((' (' !0(<!/!E*30!
0*-0!' *) (\$8*, \$&4' &3&D!5!8&*" !E(!%, ?<' !.(%, 6(!!%&?8&483. ?%3?

\$3., ' ?%(' !\$(E!) &T, .8F &!%, 88!' (/&.3) (\$3!) &T, !\$!(30*%8@0*83, .1!&\$' !/?7<%/ /, <%1!&\$' !&!) &T, !*\$!<\$-?*83*%8D!

!

V&1!Z&' &\$(@EO, !E&8!: O&*.!, A!3O(!_&%?<3!G(\$&3(@. (%.?3(' !) (I3, !8?%('% !O*) !*\$!3O&3!, <(D!5! E&\$3(' !3O(!I, 7!7(%&?8(!5!O&' !&! /., T(%3D!#\$1, \$(!\$, 3!&8<(/!9\$, E8!3O&3!3O(!3(\$?. (!8183() !*8! 83&%9(' !&-&*\$83!1, ?\$-!A() <(!A&%?<3!D!#3!(^&%3<1!3O(!&-(!EO(\$!3O(!1&.(!), 83!<9<(!13, !O&6(! 1, ?\$-!%O*<.(\$&&\$' !7(&.!3O(!%O*(A!&7, .!, A!. (&.*\$-!3O() @3O(!1&. (!^/(%3(' !3, !.(8(&.%O!&\$' ! /?7<8O!<9(!) &' D!P, E!7*, <,-1!%&\$!7(!.(%, \$%*<' !E*3O!3O(!/., %(88!*8!7(1, '\$' !) (@7?3!5!3O, ?-O3! 3O&3!&3!<(&83!3O(!?*\$6(.8*3!18O, ?<' !/., 6** (!&!8() (83(!8!/#** !<(&6(!A, !.\$(E!) , 3O(.8D!2&3?.&<<1@ 3, !) &9(!3O(!) &33(!<(-&@*3!E, ?<' !O&6(!3, !7(!\$(E!) , 3O(.8!. +!A&3O(.8@8O, ?<' !3O(!A&%?<3!A&3O(!. ! O&6(!3O(!%O*(A!. (8/, \$8*7*<3!1A, !.3O(!' &*<1!%&.(!, A!3O(!%O*<' @7?3!, A!%, ? .8(!3O(!) &*\$!/, *\$3!E&8! \$(E!) , 3O(.8D!1G, !3O&3!E&8!) 1! /., T(%3!A, !.3O(!1 (&.!5!E&8!: O&*.!, A!3O(!_&%?<3!G(\$&3(@&\$' !&! /., T(%3!3!E&8D!_*.83@&!A&%?<3!1%,)) *33((!O&' !3, !7(!A, .) (' @3O(\$!3O(!%,)) *33((!O&' !3, !7(! /(.8?&' (' !3, !.(%,)) (\$' !3O(!/., <%1@3O(\$!3O(!_&%?<3!G(\$&3(!O&' !3, !&/ /., 6(D!0O&3!E&8!3O(! (&81!/&.3D!0O(!O&' !/&!.3!E&8!3O(!&/ /., 6&<!, A!3O(!#') *\$*83.&3*, \$D!N6(\$!3O, ?-O!5!3O*\$9!3O(! B. (8** (\$3!A&6, .(' !3O(!/., <%1@*3!83&<<' D!2, 3O*\$-!O&/ /(\$(' D!5!<?.9(' !&\$' !%&?-O3!&') *\$*83.&3, .8! &\$' !T&EW7, \$(' !&\$' !E(\$3!3, !&8?%%(88*, \$!, A!) ((3*\$-8D!N6(\$3?&<1@&<), 83!A*\$&<1@5!E&8!3, <' !3O(! ; &\$&-() (\$3!:,)) *33((!O&' !&/ /., 6(' !3O(!/., /, 8(' !/., <%1D!#<<3O&3!.() &*\$(' !E&8!3O(! &/ /., 6&<!, A!3O(!: O*(A!_*\$&\$%&hAA*(.D!#'\$!O(!7&9(' D!G, @8?*3!&\$' !3*(@5!E(\$3!3, !8((!O*) D!P*8! %,) /&*\$3!E&8!3O&3!O(!%, ?<' !\$, 3! /.('*3!3O(!%, 838D!5!(^/&*\$(' !3O&3!A&%?<3!E(.(!\$, 3!&!3(. *7<1! A(.3<(!<, 3@&\$' !*\$!&\$!1%&8(!3O(!%, 83!E, ?<' !7(!7, .\$(!7!1' (/&.3) (\$38*\$!3O(!A, .) !, A!&!, ?/(<(!, A! %, ? .8(8!\$, 3!3&?-O3!7!1!(&%O!\$(E!) , 3O(.D!h%&8*, \$&<1@&!3() /, .&.1!A&%?<3!1!) () 7(!E, ?<' !\$((' ! 3, !7(!O* (' D!h6(.&<<@3O(!%, 83!3, !3O(!?*\$6(.8*3!1E, ?<' !7(!8) &<@3, !3.*6*&D!P(!T?83!<, 9(' !&3!) (D!5! 83, , ' !&-&*\$83!O*8!%<, 8(' !' , , .!E*3O!) 1!A*(.% (83!A&%(!?*\$!<O(!8*-\$(' !3O(!' &) \$(' !&/ /., 6&D!!

!

5\$!3O(!%, ? .8(!, A!&!1 (&.!/? .8?*\$-!3O(!) , 3O(.O, , ' !<(&6(!/., <%1@5!%, ?<' !\$, 3!-(3!&18*\$-<(!E,) &\$!3, ! T, *\$!) (!&3!) ((3*\$-8!E*3O!&') *\$*83.&3, .8D!#A3(!.3O(!/., <%1!3, , 9!(AA(%3@5! '* !-(3!&!6(.1!\$*(!<33(! , A!3O&\$98!A,) !&!\$(E!) , 3O(!*\$!; , ' (. \$!R&\$-?&- (8D!

!

a O&3!&7, ?3!E,) (\$!, \$!3O(!83&AA`!0O&3!5!3O, ?-O3!E&8!/?!3, !G3&AA!: , ?\$%D!5!', !3!9\$, E!O, E!O&' ! ! 3O(!13.*(' !E*3O!E0&3!. (8?<3D!; 1!' (&<*\$-8!E*3O!83&AA!%,)) *33((8!<A3!) (!7(E*<' (.(' D!5!E&8!&89(' ! 3, !8(.6(!&8!3O(!8, <(!A&%?<3!1!) () 7(!, \$!&!%,)) *33((!3, !' (%*' (!&\$!&E&.' @5!3O*\$9!, A!f" eee@!A, !. ! 3O(!, ?383&\$' *\$-!83&AA!) () 7(!, A!3O(!1 (&.!*\$!3O(!P?) &*\$3*(8!&\$' !G, %&&G*(\$%8!:, <<-(D!0O(! 83&AA!) () 7(.8!, A!3O(!%,)) *33((!A, ?\$' !3! 'AA*%?<3!3, !' (%*' (!&), \$-!8(6(.&@&\$&' '* &3(8!&\$' ! A, .%(A?<1!%,) /&*\$(' !3O&3!, \$<!, \$(!&E&.' !%, ?<' !7(!-6(\$D!G, !!5!, AA(. ' !3, !A?*\$' !7!/!3, !3O. ((! A? .3O(!&E&.' 8!A,) !) 1!A&%?<3!1. (8(&.%O!&%, ?\$3D!; 1!, AA(!E&8!?\$&\$*) , ?8<1!. T(%3(' D!; ?<3*/<(! E*\$\$(.8!E, ?<' @3O(!83&AA!) () 7(.8!, 7!T(%3(' @%O(&/(\$!3O(!&E&.' D!c, !A*-?. (D!!

!

5!O&' !, \$(, 3O(!. , <(!*\$!_&%?<3!G(\$&3(@*\$3., ' ?%*\$-!&!. (%,)) (\$' &3*, \$!A, !/&.3\$(!7(\$A*38@ EO*%O!3O(!G(\$&3(!('\$, .8(' !&\$' !EO*%O!&) (I3, !/&88D!0O(!%,)) *33((!E, .9!, \$!3O&3! .(% ,)) (\$' &3*, \$!E&8!', \$(!7!1O, 7!1!C&6*8!&\$' !V&1!Z&' &\$ (D!5!E&8!T?83!3O(!) (88(\$-(D!0O(! .(% ,)) (\$' &3*, \$!E&8!A*(.%<1!, //, 8(' !7!1! [, 7(.3!c. AA*3O8@\$, E!() (. *3?8! /., A(88, .!, A! /O18*%8@ 8, !A&.!&8!5!%, ?<' !8((!(\$3*. (<!, \$!. (<*- , ?8!-., ?\$' 8D!5!O&6(!\$(6(!?*\$' (.83, , ' !E0!18,) (!: O.*83*&\$8! .(-&.' !O,) , 8(^?&<3!1!&8!&!) , .&<D, . . . !7!8(' !, \$!&!A(E!/&88&- (8!*\$!R(6*3*%?8!&\$' ! [,) &\$8@EO*<(!

!

/&88*\$-!, 6(.!30(!*\$83.?%3*, \$8!3, !83, \$(! *8, 7(' *(\$3!8, \$8@9*!&<<!) &<(8!*\$!%/3?. (' !%*3*(8!30&3!
. (8*83!&33&%9@\$, 3!E (&.!3E, !9*\$' 8!, A!%<, 30@&\$' !8, !, \$D!N*30(.!30(!+*7<(!*8!c, ' !8!E, .' @, .*3!*8\$!3D!
2, !/*%9*\$-!&\$' !%0, , 8*\$-D!

!

#8!: 0&*.!, A!30(!_&%?<3!1!G(\$&3(!5!) (3!), \$30<1!E*30!30(!B., 6, 83@30(\$!; &.9!Z&) <(3@*\$*3*&<<1!E*30!
8,) (!3.(/' &3*, \$D!#8!C(&\$!, A!30(!P(*\$J!G%0, , @; &.9!O&' !&//(&.(' !*\$!3(<(6*8*, \$!&' 6(.3*8()) (\$38!
8?//, .3*\$-!30(!%, \$83.?%3*, \$!, A!&!\$(E!A, , 37&<<83&' *?) !&\$' !7&8(7&<</&.9!3, !7(!/&' !A, .!7!1!&!\$(E!
3&^

n0&\$-d&\$' !8?//, .3(' !71!G%0(*\$(8!&\$' !C&\$980!53!8!/. ,) *\$(\$3<! (/. (8(\$3(' !*\$!) (' *%&! (30*%8!71!
#<(^!R, \$' , \$d&\$' !*\$!/81%0, <, -1!&\$' !*\$(30*%8!&\$' !&.3*A*%&!*\$3(<*-(\$%(!X&) , \$-!8(6(.&! , 30(!
30*\$-8Y!71!C&6*' !C&\$980!53!0&8!&!6(.1!8?%%(88A?d?*\$' (.-&' ?&3(!*\$-?*83*%8!/. , -.&) !<(' !71!; &\$' 1!
&\$' !0,) !a (.\$.