

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

"00=R23"" #(\$9&',(!7<<&+,9+!X%:F-<<:%A!B,<-%<!&9!7MM(&-;!S-8,U&:%!  
 ! 79,(?<&!
 ! O-8,Q&(&,+&:9!,9;!PM-'&,(!J;\$',+&:9A!H:&+8-,<-%9!!T9&U-%&+?!  
 233=! .. &<&9K\$&<8-;!b\$-<+!V,'\$(+?A!PM-'&,(!J;\$',+&:9!X%:K%, ) A!!!!!!!!!!!!!!!  
 E8&:!P+,+-!T9&U-%&+?!  
 233>R #(\$9&',(!7;c\$9'+!V,'\$(+?A!. : '+:%,(!,9;!B,<-%<X%:K%, ) <!!  
 !!!!!!. . -M,%+ ) -9+:F!X<?'8:(:K?A!4 -<-%9!H-I!J9K(,9;!T9&U-%&+?!  
 2330R23"O!!!!!!7;c\$9'+!7<<&+,9+!X%:F-<<:%A!. . -M,%+ ) -9+:F!X<?'8&,+?!\P'8: :(!F!!!!!!!  
 B-; &'&9-A!T9&U-%&+?!:F!B,<<,'8\$-<+&A!4 : '%-<+&%!  
 ! 2323R! ! 7;c\$9'+!X%:F-<<:%A!P'8: :(!F5-,(+8!P'&-9'-<!O-K&#!# :((-K-!  
 !  
#:\$%<-<!G,\$K8+!/  
 !  
 "0>>R02 G- ) M(-!T9&U-%&+?!R!9+%; ;\$'+&:9+!:X<?'8:(:K?d!@-,%9&9Kd!  
 JZM-%& ) -9+,(!X<?'8:(:K?!\!@-,Q%:+%?:!  
 "002 O\$+K-%<T9&U-%&+?!#, ) ;-9!\!@-,%9&9KA!B- ) :%?A!# :K9&+&:9d!  
 JZM-%& ) -9+,(!X<?'8:(:K?!\@-,Q%:+%?:!  
 "00=R23"" H:&+8-,<-%9!T9&U-%&+?! !7;U,9'-;!@-,%9&9K!`!WS,&'  
 ! X%&9'&M(-<!:F!@-,%9&9KYd!7;U,9'-;!@-,%9&9K!`!W\*-%Q,(!  
 ! S-8,U&:&Yd!7;U,9'-;!@-,%9&9K!`!WPN&99-%,9;#!#%&+&'<Yd!G8-<&!  
 ! P- ) &9,%d!V&-(;!X(,'-) -9+!  
 233>R! 4 -<-%9!H-I!J9K(,9;!T9&U-%&+?! !O,;&',(!S-8,U&:&%<) !WP e!  
 =]3Yd!@-,%9&9K!WP e!]3"Yd!G8-:-&',(IV:\$9;,+&:9<!WP e!]3CYd!  
 M%:U;<-!\$M-%U&:&9!F%:!; : '+:%,(!,9;!) ,<-%<!+\$;-9+!  
 2323R! O-K&#!# :((-K-!`!-\*-%Q,(!S-8,U&:&d!O-<-,%'8!. -<&K9!  
 !  
X:&+&:9<!  
 !  
 "00>R!2332! X%:K%, ) ! . &%-' +:%A!H-I!J9K(,9;#!#-9+-%F%:#8&(;%-9!  
 2332R! ! . &%-' +:%A!F!O-<-,%'8A!H-I!J9K(,9;#!#-9+-%F%:#8&(;%-9!  
 23"3R23"L! #8,&%!:F!X%:F-<&:9,(IX%, '&'-A!G8-!S-%N<8&%-!7<<:'&,+&:9!F%:!!  
 ! S-8,U&:&%!79,(?<&!,9;!G8-%,M?!"  
 23"3R23"L! S : ,%;!:F! . &%-' +:%A!7<<:'&,+&:9!:F!X%:F-<&:9,(!S-8,U&:&%!79,(?<+<  
 23"R23"D! X%<&,-9+!R!S : ,%;!:F! . &%-' +:%A!7<<:'&,+&:9!:F!X%:F-<&:9,(!  
 S-8,U&:&%!79,(?<+!  
 !  
B,c:&#!#(&9&',(!O-<M:9<&Q&(&+&-<F%:!+8-!H-I!J9K(,9;#!%&F%:#8&(;%-9/!  
 !  
 "6 P\$M-%U&:&9!:F!,((!%-<-,%'8!' :9;\$'+-;!,+!8-!H-I!J9K(,9;#!#-9+-%F%:#8&(;%-96!  
 26 G%,&9&9K1<\$M-%U&:&9!:F!X%:K%, ) ! . &%-' +:%%<A!X%:K%, ) !PM-'&,(&<+&!  
 #: :%;&9,+:&%<A!,9;!G-, '8-%<-%U&9K!'8&(;%-9!,9;!?:\$9K!, ;\$(+! I &+8!, \$+&<) !:&%  
 :+8-%;-U-(:M) -9+,(!;&:,Q&(&+&-<!  
 L6 P\$M-%U&:&9!:F!,; ) &9&<+%,+&U-A!'(&9&',(!!-;\$',+&:9,(!!,9;%<&,-9&,(!  
 F\$9'+&:9&9K!:F!,F%:- ) -9&:9-; !%-<&,-9&,(!\$9&+6!



#, ) Q%%;K-!#-9+-%!F:%!S-8,U&:%!P+\$;&-<!WP\$MM:%+&9K!B - ) Q-%A!233DR  
M%-<-9+Y!

7<<: '&,+&:9!:FIX%:F-<&:9,(!S-8,U&:%!79,(?<&:<!WP\$MM:%+&9K!B - ) Q-%A!  
2330RM%-<-9+Y!

! ! ! @ : ', (!P: '&-+&-<!  
S -%N<8&%-!7<<: '&,+&:9!F:%!S-8,U&:%!79,(?<&!,9;!G8-%,M?WB - ) Q-%A!  
"00=RM%-<-9+d!# :9F--9'-!M,(99&9K!,9;!<'8-;\$(&9K!' : ) ) &+--! ) - ) Q-%A!  
"00>RM%-<-9+d!X%:K%, ) !#8,&%!"00OR233d!X%-&:-9+RJ(- '+!2333R233 "d!  
X%-&:-9+!233"R2332d!S 7 #S!7 #J!' : :%;&9,+:&F:%!S 7 S 7 G!2332RM%-<-9+Y!  
. -(, I ,%-!\* ,((- ?!7<<: '&,+&:9!F:%!S-8,U&:%!79,(?<&:<!WB - ) Q-%A!"0>>R  
"OOLY6!

b%,9+</!

! 7 MM(&',9+!/O&NR,U-&:<:9!,9;!%<NRM%:9-9-<&9!8\$),9!,9;!9:98\$),9!,9&),(<A!  
S&: ) - ;& ,(!O-<-,%'8!P\$MM:%+!b%,9+V\$9;-;/!h2A]33A!!  
G- ) M(-!T9&U-%<&+?A!"OO"6!

! # : R`9U-<&K,+:&%!S-8,U&:%,(! ) : ) -9+\$) !,9;!F(-Z&Q&(&?&9!) -9+,(!%-+,%;,+&:9!  
W 4 &(&, ) !\*6!. \$Q-!\\IX^A!b%,9+!9\$) Q-%!5 . LL>32!F%: ) !+8-!H,+&:9,(!'9<&+\$+-!:F!  
#8&(;!5-,(+8!,9;!5\$),9!. -U-(:M) -9+!WH`#5 . YA!F\$9;-;!2332R233]6!

! X&9'&M,(!'9U-<&K,+:&%!IX%:c-'!`/!7!S-8,U&:%,(!J':9: ) &!'7MM%:, '8!+!:B ,Z& ) &^&9K!J9U&%:9) -9+,(!V--;Q, 'N!W 4 &(&, ) !\*6!. \$Q-!\\# :R`9U-<&K,+:&YA!  
b%,9+!9\$) Q-%!"!XE"!5 . !3D=====R3"!F%: ) !+8-!H,+&:9,(!'9<&+\$+-!:F!#8&(;!5-,(+8!  
,9;!5\$),9!. -U-(:M) -9+!WH`#5 . A!F\$9;-;!B ,?!233DR2330Y6!

! # : RX&9'&M,(!'9U-<&K,+:&%!E%K,9&^,+&:9!F:%!7\$+& ) !O-<-,%'8A!2330!7MM(&-;!  
O-<-,%'8!#: ) M-+&:9!WI&+8!O-Q-'',!B ,'. :9,(;Y/JZ,) &9,+&:9!:F!X%-%-i\$&+&+!  
PN&(<!F:&@-,%'9&9K!T<&9K!\*&:-!B :;-(&9K!F\$9;-;"!12330R"123"36!

! # : RX&9'&M,(!'9U-<&K,+:&%!E%K,9&^,+&:9!F:%!7\$+& ) !O-<-,%'8A!23"3!7MM(&-;!  
O-<-,%'8!#: ) M-+&:9!WI&+8!O-Q-'',!B ,'. :9,(;!,9;!. &,9,!X,%&?R#%\$ I ?<Y/  
T<&9K!,!;&-%+'!Q-<-U,+&:9!,<<-<) -9+Q,++-%!+!:!,<<-<!:+\$+: ) -<!:F!J`S`!F%:  
'8&(;%-9! I &+8!,+\$+& ) A!F\$9;-;"!123"3R"123" "6!

! # : R`9U-<&K,+:&%!IX%:c-'!`/!S-8,U&:%,(!J':9: ) &'<,9;!+8-!,9,(?<&:<:F!# 7 S!W<-%!  
. -(-:9!/IX%&9'&M,(!'9U-<&K,+:&F:%!X%:c-'!LA!B &'8, -(!#, +,(; :X%:K%, ) !X%:c-'!X^A!  
b%,9+!9\$) Q-%!"!X3"!5 . 3] ]D]=R3"72!F%: ) !+8-!H,+&:9,(!'9<&+\$+-!:F!#8&(;!5-,(+8!  
,9;!5\$),9!. -U-(:M) -9+!F\$9;-;!23"3R23" ]6!

! # : R`9U-<&K,+:&%!S-8,U&:%,(!X-%<&+&:9'!-/!S,&'A!G%,9<(&:9,(A!,9;!#(&9&',( !  
P+\$; &-<d!G:9?I-H-U&9A!X%&9'&M,(!'9U-<&K,+:&A!b%,9+!9\$) Q-%!"!OE"!5 . 3=D]C=R  
3"7"!F%: ) !+8-!H,+&:9,(!'9<&+\$+-!:F!#8&(;!5-,(+8!,9;!5\$),9!. -U-(:M) -9+A!  
F\$9;-;!23" "R23" =6!

J ;&+:%&,(!O-U&-I/!

!  
"00CR"000 b\$-<!O-U&- I -%!F:%!+8-!a:\$%9,(!:F!7MM(&-;!S-8,U&:%!79,(?<&<6!!!  
2333R! B - ) Q-%!:F!J ;&+:%&,(!S :,%;!\\S-8,U&:,(^9+-%U-9&:9<6!  
2333R233" B - ) Q-%!:F!S :,%;!F!J ;&+:%<!\\a:\$%9,(!:F!7MM(&-;!S-8,U&:%!79,(?<&<6!  
2332R23">! B - ) Q-%!:F!S :,%;!F!J ;&+:%<!\\a:\$%9,(!:F!7MM(&-;!S-8,U&:%!79,(?<&<6!  
233>R23"D! B - ) Q-%!:F!S :,%;!F!J ;&+:%<!\\G8-!79,(?<&<!F!\*-%Q,(!S-8,U&:%!  
2332R! b\$-<+!7 '+&:9!J ;&+:%!F:%!+8-!a:\$%9,(!:F!7MM(&-;!S-8,U&:%!79,(?<&<6!  
2332! b\$-<!O-U&- I -%!\!J\$%:M-,9!a:\$%9,(!:F!#(&9!,(!H\$%&:&9!  
2332R23"2! b\$-<!O-U&- I -%!\!a:\$%9,(!:F!7\$+&<)!,9;!. -U-(:M) -9+,(! . &<:%; -%<6!  
2332! b\$-<!O-U&- I -%!\!JZM-%& ) -9+,(!S&:(K?!,9;!B-;&'&9-6!  
233D! b\$-<!O-U&- I -%!\!S-8,U&:%!O-<-,%'8!B-+8:;[!`9<+\\$](#) ) -9+<!,9;!  
2330R23"3! b\$-<+!7 '+&:9!J ;&+:%!\!S-8,U&:%!79,(?<&<!9!X%, '+&'-!  
23"3R 7 '+&:9!J ;&+:%!\!S-8,U&:%!79,(?<&<!9!X%, '+&'-!  
23""R b\$-<!O-U&- I -%!\!X-;,&%&'<!  
23"2R J ;&+:%R&9R#8&-F!\!S-8,U&:%,(^9+-%U-9&:9<!  
2323R! ! B - ) Q-%!:F!J ;&+:%&,(!S :,%;!\\a:\$%9,(!:F!8-!JZM-%& ) -9+,(!79,(?<&<!! :F!S-8,U&:%!  
!

S&Q(&:K%,M8?/

! E%&K&9,(!X,M-%<1S : :N!#8,M+-%</

!  
B : :%-!\_A!S\$((,%;!7A!P I --) ,9!bA!78-,%9!4 56!7<<-<&9K!,9;!G%-,+&9K!79Z&-+?!&9!`9;U&\$,(<! I &+8!  
7\$+&<) 6! ! "#\$%&'() \* '+&,&-\$.&' /0) I -. '2"()34356!;:&"36""CC|3"D]DD]]2""3]"=C>!  
!  
#&U&;&9&R B :++,A!#6A!B , 'H,\$(A!56A!B ,9;-(A!H6A!O:c,<A!76A!g!78-,%9A!4 6!W&9!M%-<&Y6!7\$+: ),+&'  
%-&9F: '% - ) -9+6!`9!a6!@6!B ,+<9!W-;<6YA!7MM(&-;!Q-8,U&:%,9,(?<&<!7!' : ) M%-8-9<&U-!8,9;Q: :N6!



!  
78-,%9A! 4 65 6!W23"=Y6!G8-!H- I !J9K(,9;!#-9+-%!F:;%#8&(;%-9!/7MM(&-;!Q-8,U&:%!,9,(?<&<!F:;%!+%-,+&9K!,(((-U-(<!:F! 7P . !<-U-%&+?6!9!O6b6!O: ),9'^?N!g!a6!B 'J , '8&9!WJ ;<YA#! M%-8-9<&U-!B : ; -(<!:F! 7\$+&<) !PM- '+\$ ) ! . &<:%; -%6!H- I !e :%N!/PM%&9K-%6!  
!  
78-,%9A! 4 65 6A! 5&9-(&9-A!X6H6A! g !. ,U&;A!V6b6!W"002Y6!O-(,+&U-!M%-F-%-9' -<!F:;%!U,%&:\$<!Q&RU,(\$-;!%,+&:!'8- ;\$(-<0)6/&7\$8)9 "\$(/&/:)\$/+!) "#\$%&'(;34;!D3CRD" ]6!  
!  
b%, '-A!H6A! 78-,%9A! 4 65 6A! g !V&<8-%A! 4 6 4 6!W"OODY6!!P-U-%-!Q-8,U&:%!M%:Q(- ) <&9!; -U-(:M ) -9+,((?:;-(&,-;!5 -M,+&+&<RS !M:<&+&U-!'8&(;%-96!<#"')9\$/ -".;) =>=;!CLC6!  
!  
\_-% I &9A!B 6J 6A! 78-,%9A! 4 65 6A!S \$%;A! . 6B 6A! g !J &'8-%A!X6!W"00]Y6!!7!Q-8,U&:%,(!-' :9: ) &'!&9+-%M%-+,+&:9!:F!  
F: : ;!%-F\$<, (6!!?'@(/\$8)',)6AA8&"+)!"#\$%&'()6 /\$8BC&C;)3D;!2D]R2=36!  
!  
78-,%9A! 4 65 6A! \_-% I &9A!B 6J 6A!J &'8-%A!X6A!P8,9+^A!a6A! g !P I -, %&9K-9A! 4 6!W"00=Y6!!79!, (+-%9,+&9K!  
+%-,+ ) -9+<!': ) M,%&<:9!:F!+ I :!&9+-9<&U-!&9+-%U-9+&:9<!F:;%!F: : ;!%-F\$<, (6!!?'@(/\$8)',)6AA8&"+)!"#\$%&'()6 /\$8BC&C;)3E!L2 "RLL26!  
!  
V&-(;A! . 6X6A!G:99- , \$A!V6A! 78-,%9A! 4 65 6A! g !5&9-(&9-A!X6H6!W"00=Y6!!X%-F-%-9' -!Q-+ I --9!U,%&,Q(-R%,+&:!,9:!  
!

78-,%9A! 4 65 6A! \_-% I &9A! B 6J 6A! J & '8-%A! X6A! G, ?(:%A! #6A! g !H&'8:(<A!\_6!W233"Y6!79!7 S 7 #!' : ) M,%&<:9!:F!  
+ I :!&9+-9<&U-!&9+-%U-9&:9<!F:;%!F: : ;!%-F\$<, (6! ! "#\$%&'() \* '+&, &-\$.&' /;) 3P;!L>]RD3 ]6!  
!  
78-,%9A! 4 65 6A! #,<+&9-A! G6A! H,\$(+A!\_6A! g !b %--9A! b 6!W233"Y6!79!,<<-<<) -9+!:F!F: : ;!, ''-M+,9'-!&9!'8&(;%-9!  
I &+8!, \$+&<) !: %!M- %U,<&U-!; -U-(:M ) -9+, (!:&<:%; -%!R

!

>



P+, ?-%A!P6A!b%, FFA!O6!S6A!@&QQ?A!B 6!@6A!g!78-, %9A!4 6!5 6!W2330Y6!!JFF-+'!F!'8:&'!-!:F!+, <N!<-i\$-9'-!:9!  
 %-<M:9; &9K6!!S"C"\$( -#)&/)6@.&C7)XA"-.( @7)N&C'( +"( C;) =;)CCLRCD26!  
 !  
 X-9'-A!P6G6A!O:<':-A!J6B6A!S:\$%%-+A!a6#6A!78-, %9A!4 6 5 6!W2330Y6!JU,(\$,+&:9!:F!+8-!%-(-,+&U-!U,(&,&+?!:F!  
 +8%--!; -<'%&M+&U-!, <<-<<) -9+! ) -+8:; <6!?'@(/\$8)',)6AA8&"+)!"#\$%&'()6/\$8BC&C!>3A!D2]RDD=0!  
 !  
 \_(-&9A!a6@6A!B, ' . :9,( ;A!O6X6V6A!\* , &((,9':\$%+A!b6A!78-, %9A!4 6 5 6A!g!. \$Q-A!4 6\*6!W2330Y6!G-, '8&9K!  
 ;& '%% ) &9,+&:9!:F!, ;(+!K, ^-!; &%- ' +&:9!+!: '8&(; -9! I +&8!, \$+&<) A!S"C"\$( -#)&/)6@.&C7)XA"-.( @7)  
 N&C'( +"( C;)=A!D2RD06!  
 !  
 5-%<':U+&'8A!S6A!O:<':-A!J6B6A!@&QQ?A!B6J6A!S:\$%%-+A!a6#6A!g!78-, %9A!4 6 5 6!W2330Y6!7!) -+8:; :(:K?!F:%  
 &; -9+&F?&9K!M%- '\$%<:<!+:!M%:Q(- ) !Q-8, U:&%!?'@(/\$8)',)6AA8&"+)!"#\$%&'()6/\$8BC&C!>3;!=OCRC320!  
 !  
 #8,MM-((A!H6A!b%, FFA!O6S6A!@&QQ?A!B6A!g!78-, %9A!4 6 5 6!W2330Y6!!V\$%+8-!-U,(\$,+&:9!:F!+8-!-FF- ' +<!:F!  
 ) :+&U,+&9K!:M-%, +&:9<!:9!M%-F-%-9'-!, <<-<<) -9+!:+\$+: ) -<%-<-, '%8!&9!, \$+&<) !<M-' +&%\$ ) !; &:&:; -%<6!  
 S"C"\$( -#)&/)6@.&C7)XA"-.( @7)N&C'( +"( C;) ==3R==00!  
 !  
 B &K\$-(A!#6A!#(,%NA!\_6A!G-%-<8N:A!@6A!g!78-, %9A!4 6 5 6!W2330Y6!!G8-!-FF- ' +<!:F!%-<M:9<-!&9+-%%\$M+&:9!, 9;!  
 %-; &%- ' +&:9!, 9; !<-(-' +&U-!<-%:+:9&9!%-&M+, N-!&98&Q&:+<!W<-%+, (&9-Y!:9!U: ', (!<-%- :+?M?6!!?'@(/\$8)',)  
 6AA8&"+)!"#\$%&'()6/\$8BC&C!>3!>>LR>>6!  
 !  
 . \$Q-A!4 6! \* 6A!78-, %9A!4 6!5 6A!@&:9-((:R. -H:(FA!\_6!B6A!g!B`^(U, 9-A!4 6!a6!W2330Y6!S-8, U&:%, (!  
 ) : ) -9+\$ ) /!G%, 9<(, +&:9, (!%-<-, '%8!&9!&9+-((-'+\$, (!, 9; !; -U-(:M) -9+, (!; &<, Q&(&+&-<6! !"#\$%&'()6/\$8BC.)  
 < '+\$B;)54A!2L>R2]L6!  
 !  
 B &K\$-(A!#6V6A!e, 9KA!5 6A!V!99A!5 6!g!78-, %9A!4 6 5 6!W2330Y6!T<&9K!' :9; +&:9, (!; &<'%&) &9, +&:9!+%, &9&9K!+!: !  
 -<, Q(&<8!; -&U-; !+Z+\$, (!' 9+:(!&9!, '+&U&+? !<'8-; \$(-< I +&8!'8&(; -9!; &, K9:<-; !I +&8!, \$+&<) 6!!?'@(/\$8)  
 ',)6AA8&"+)!"#\$%&'()6/\$8BC&C!>3!C3LRC306!  
 !  
 78-, %9A!4 6 5 6A!g!X, %%?R#%\$ I ?<A!. 6J6A!W23"3Y6!tO-U&- I !:F!+8-!Q: :N!^?@C.): &%")#&7).#") [ #\$\$" \_^0)? ' @(/\$8)  
 ',)6@.&C7)\$/+ )N%"8'A7"/. \$8)N&C\$2&&."C;) >4; !"3LOR"3D"0!  
 !  
 78-, %9A!4 6!5 6!W23"3Y6!! . :!; &-+&U-(-?+&- , +!, \$+&<) n!6 I !6)S"A'(. ."(!" ]6!  
 !  
 G-&-<8N:A!@6A!B, ' . :9,( ;A!O6X6V6A!g!78-, %9A!4 6 5 6!W23"3Y6!

!  
X-((-+&-%A!\_6A!B 'H, ) ,%,A!S6A!S%,K,R\_-9?:9A!X6A!g !78-,%9A! 4 656!W23 "3Y6!JFF- '+!:F!U&; - :!<-(FR ) :9&+:%&9K!  
:9!M%: '- ;\$%,(!&9+-K%&+?6! ! "#\$%&'(\$8)J/. "(%"/.& '/C;)3P,!2="R2CD0!  
!  
X,%?R#%\$ I ?<A!. 6J6A!H-, (A!#6B 6A!78-,%9A! 4 656A! 4 8--(-%A!J 6A!X%- ) '8,9;-%A!O6A!@:-Q A!B 6A!g ! . \$Q-A! 4 6\*6!  
W23 "Y6!!O-<&<+,9'-!:+! . &<%\$M+&:9!&9!,!#(<<%: : ) !P-++&9K6!?'@(/\$8)',)6AA8&"+) ! "#\$%&'()6/\$8BCtC0!  
!  
B ,8:9-?A!76B 6A!B &K\$-(A!#6V6A!78-,%9A! 4 656A!g !S -((A!a6!W23 "Y6!!G8-!%:(-!:F!' : ) ) :9! ) :+:%!59T//TTQq0 . 24 000

!  
. & 'N<:9A!#676A!B , ' . :9,(;A!O6X6V6A!B ,9<F&-(;A!O6A!b \$&(8,%;A!X6A!a:89<:9A!#6A!g !78-,%9A! 4 656!W23"DY6!

!

"2

#&':9-A!V6a6A!b%,FFA!O6S6A!g!78-,%9A!4656!W23"]Y6!^9'%-,<&9K!+8-!-FF&'&-9'? :F!M,&%- ;R<& ) \$(< M%-F-%-9'-!,<<-<<) -9+<!Q?& ;-9+&F?&9K!',+-K:&%-<! :F!M%-F-%-9'-6!a:\$%9,( :F!7MM(&- ;!S-8,U&:% 79,(?<&D>A!22"R22=6!

!

B,'.:9,(;A!a6A!g!78-,%9A!4656!W23"]Y6!G-,'8&9K!:Q<-%U,+&:9,(!(-,%9&9K!+:'8&(;%-9!I&+8!,+\$&<)6! a:\$%9,( :F!7MM(&- ;!S-8,U&:% 79,(?<&A!D>A!>33R>"=6!

!

B,'.:9,(;AO6X6V6A!.&N<:9A!#676A!B,%+&9-,\$A!B6A!g!78-,%9A!4656!W23"]Y6!X%- -i\$&<&-!<N&((<!+8,+! <\$MM:&+!(-,%9&9K!+8%:\$K8!U& ;-:!) : ;-(&9K6!J;\$',+&:9!,9;!G%- ,+ ) -9+!F!#8&(;%-9A!L>A!LLRDC6!

!

B,'B,9\$<A!#6A!B,'.:9,(;AO6X6V6A!g!78-,%9A!4656!W23"]Y6!G-,'8&9K!,9;!K-9-%,(&^&9K!M%-+9;!M(,?A!9 '8&(;%-9!I&+8!,+\$&<) !\$<&9K!U& ;-:!) : ;-(&9K!,9;! ),+&Z!+,&9&9K6!S-8,U&:%,(!^9+-%U-9+&:9<A!L3A!"0"R 2">6!

!

B: :%-A!\_6B6A!#&U&;&9&RB:++,A!#6A!#(,%NA!\_6B6A!g!78-,%9A!4656!W23"]Y6!P-9<:%?&9+-K%,+&:9!,<!,! +%- ,+ ) -9+!F%:\$+ :),+&',((?R),&9+,&9- ;!<+-% - :+?M?6!S-8,U&:%,(!^9+-%U-9+&:9<A!L3A!0]R""6!

!

X,\$I-(<A!7676A!78-,%9A!4656A!g#! :8-9A!P6a6!W23"]Y6!O-' : ) Q&9,+&U-!K-9-%,(&^,+&:9!:F!+,+'<!+8%:\$K8! ) ,+&Z!+,&9&9K!I&+8!&9;&U& ;\$,(<!I&+8!,+\$&<) !<M-'+%\$) !;&<: ; -%!G8-!79,(?<&A!F!\* -%Q,(!S-8,U&:%A! L"A233\2"D6!

!

P-(-'+- ;!X%-<-9+,&:9<!Q?!"9U&+,&:9!/

!

7M%6A!23"2! JZM(:&9K!Q-<+M%,+'&'-<!&9!,+\$&<) !+- ,+ ) -9+6!G,(N!K&U-9!,<M,%+!:F!+8-!P8%&U-%#-9+-%!! ! ! #:((i\$&\$) !P-%&-<A!4,(+8,) A!B76!

7M%6A!23"2! PN&99-%f< I %&+&9K<,9;!+8-%%!%-(-U,9'-!+:!M%,+'&9K!Q-8,U&:%,9,(?<+6!^9U&+- ;!+\$+:&,(! M%-<-9+- ;!,+!+8-!2!"!,99\$,(!'9U-9+&:9!:F!+8-!7<<:'&,+&:9!:F!X%:F-<&:9,(!S-8,U&:% 79,(?<+&A!G,) M,A!V@6!

B,%6A!23"2!! #,((F%:&9;-M-9;-9'-!F%: ) !M<?'8:( :K?6!\_-?9:+-!, ; ;%-<<!K&U-9!,+!+8-!,99\$,(!'9F-%-9'- ! :F!+8-!X-99<?(U,9&,!7<<:'&,+&:9!:F%: !S-8,U&:% 79,(?<&A!5-%<8-?A!X76!

V-Q6A!23"2

B ,%6A!23""! G8-!-(\$<&U-9-<<! :F!Q-<+!+-, '8&9K!M%, '+&' -</O-<-, %'8!&9!+8-!+%-9'8-<6!G,(N!K&U-9!,+!8-!  
 ,99\$,(!':9F-%-9'-!:F!+8-!X-99<?(U,9&,!7<<: '&, +&:9!F:&S-8,U&:&79,(?<&A!5-%<8-?A!X76!  
 V-Q6A!23""! S-<+!M%, '+&' -</O-<-, %'8!&9!+8-!+%-9'8-<6!9U&+ - ;!, ; ;%-<<!, +!8-!, 99\$,(!':9F-%-9'-!:F!+8-!  
 #,(&F:&9&,!7<<: '&, +&:9!F:&S-8,U&:&79,(?<&A!P,9!V%,9'&<':A!#76!  
 a\$(6A!23"3! H:-,<?,9<I -%<F:&%<+-%- :+?M?/7!': ) M%-8-9<&U-!,MM%:, '8!M%: ) :+&9KF\$9'+&:9,(<N&(<<6!  
 ! P-<&:9!M%-<-9+- ;!, +!8-!7\$+&<) !P: '&+?!:F!7 ) -&&', '!':9F-%-9'-A! . ,(<A!Gq6!  
 V-Q6A!23"3! G8-%-!&<9!:-,<?,9<I -%&+! :<+-%- :+?M?/7!': ) M%-8-9<&U-!,MM%:, '8!+!M%: ) :+&F\$9'+&:9,(  
 <N&(<6!X,M-%!M%-<-9+- ;!, +!8-!, 99\$,(!':9F-%-9'-!:F!+8-!G-Z,<7<<: '&, +&:9!F:&S-8,U&:&  
 79,(?<&A!b ,(U-<+:9A!Gq6!  
 E '+6A!2330! G8-!-+8&'<!:F!,U-%<&U-!' :9+&:(/IV%: ) !%-<-, %'8!+!: '8,((-9K&9K!',<-<!,9 ;!(&F-!(-<<:9<6!79!  
 7XS 7!X%:F-<&:9,(! . -U-(:M) -9+!P-%&-<I :%N<8:M!M%-<-9+- ;!, +!8-!S -%N<8&%-!  
 7<<: '&, +&:9!F:&S-8,U&:&79,(?<&!,9 ;!G8-%,M?A!7 ) 8-%<+!B 76!  
 7 \$K6A!2330! #,9!,9!,MM(&-!%<-,%'8-%!F:((: I !PN&99-%f<, ;U&'-n@ : :N&9K!,+! :9-!+8&9KA!F&9;&9K!  
 ,9:+8-%!^9U&+ - ;!, ; ;%-<&IK&U-9!&9!, '-M+,9' -!:F!,!. &<&9K\$&8- ;!# :9+&Q\$+&:9!+!:!7MM(&- ;!  
 S-8,U&:&79,(?<&!,7 I ,%,! ;!, +!8-!, 99\$,(!':9F-%-9'-!:F!+8-!7 ) -&&', 9!X<?'8:(:K&',(!  
 7<<: '&, +&:9A!G:&9+!# ,9 ,;,6!  
 a\$96A!2330! V%: ) !U: ',(!<+-%- :+?M?+!:U-%Q,(!Q-8,U&:&6! 4 :%N<8:M!' :9;\$' +- ;!, +!8-!X,-9+<f!J ;\$' ,+&:9!  
 ,<7\$+&<) !G8-%,M&<+<WXJ 7GY!V,'&9K!7\$+&<) !':9F-%-9'-A!S -(F,<+!%^%-(,9;6!  
 7 M%6A!2330! S-8,U&:&,(!,<<-<<) -9!,9 ;!%&-,+) -9+!:F!M- ;&, +&!'F-- ;&9K!;&<%; -%<6! 4 :%N<8:M!K&U-9!,+!  
 +8-!,99\$,(!':9F-%-9'-!:F!+8-! . &U&<+:9!:F!S-8,U&:\$%79,(?<&A!G8-!X<?'8:(:K&',(!P: '&+?!
 :F!%^%-(,9;A!b ,(I ,?6!  
 B ,%6A!2330! G%,9<(+&9K!%-<-, %'8!&9+!M%, '+&' -!/G- , '8&9K!'8&(; -9! I &+8!,+\$+&<) !N&(<F:&9;-M-9;-9' -A!  
 P- ) &9,%!M%-<-9+- ;!, +!8-!# :99- -&'\$+!# :((-K-X<?'8:(:K?!. -M,%+) -9+!# :((: i\$&!) !  
 P- %&-<A!H- I @ :9 ;!9A!#G6!  
 a,96A!2330! V%: ) !,\$+ : ) ,+&'!%&9F:&%' - ) -9+!+!:MM%:M&&, +-<: '&, (!Q-8,U&:&7<<-<&9K!,9 ;!%&-,+&9K!  
 <+-%- :+?M&'Q-8,U&:&6!P- ) &9,%!M%-<-9+- ;!, +!8-!JU& ;-9'-RS ,<- ;!9+-%U-9&:9<F:&  
 G- , '8&9K!^9 ;&U& ;\$,(< I &+8!7\$+&<) !':9F-%-9'-A!H- I +: I 9A!X76!  
 H:U6A!233>! G8-%,M-\$+&'!&9+-%U-9&:9<F:&,+\$+&<) /!&:<?9'%, +&'!M%-<-9+, +&:9!% -i\$&% -<&9 ;&U& ;\$,(&^- ;!  
 +&-,+) -9+!7 ; ;%-<<! ;-(&U-% - ;! :+8-! . -M,%+) -9+!:F!S% ,&9!,9 ;!# :K9&&U-!P'&-9' -<A!B `GA!  
 #, ) Q& ;K-A!B 76!  
 7 \$K6A!233>! G%,9<(+&9K!%-<-, %'8!+!M%, '+&' -!,9 ;!M%, '+&' -!+! :%<- -, %'86!X,M-%!M%-<-9+- ;!, +!8-!F&%<+!  
 ,99\$,(!':9F-%-9'-!:F!+8-! 4 &<':9<9!7<<: '&, +&:9!F:&S-8,U&:&79,(?<&A!\_ -9 :<8,A! 4 `6!
 B ,%6A!233>!

7M%6A!233C! P+-%-:+?M?/!7\$+: ) ,+&'!%-&9F:%' - ) -9+A!Q-8, U&:%, (!M-%<&<-9'-A!, 9; !%-<M:9<-!8&-%, %'8&-<!  
`9U&+-;!, ; ;%-<<!M%-<-9+-;!, +!+8-!, 99\$, (!':9F-%-9'-!:F!+8-!#:99-+'\$+!7<<: '&, +&:9!F:&%!  
S-8, U&:%!79, (?<&<A!#%: ) I -((A!#G6!  
V--; &9K!&<\$-<!&9! '8&(; %-9! I &+8!, \$+&<) 6!^9U&+-; !M

!

"]



PU-&9Qc:%9<;:+&%A!S6A!. &'N<:9A!#676A!g!78-,%9A!4656!WB ,?23""Y6!7'+&U&+?I+,9<&&:9<,9;!M%:Q(-) !  
 Q-8,U&:%!&9!<M-'&,(!-;\$',+&:9!'(<<%: )<6!X,M-%!M%-<-9+-;!,+!+8-!LC\$!7S7`!799\$,(!# :9U-9+&:9A!  
 . -9U-%A!#E6!!  
 B,' .:9,(;A!a6A!X,%?R#%\$ I ?<A!. 6A!78-,%9A!4656A!g !!P' , )&8:%9A!P6!WB ,%'8!23""Y6!7<<-<&9K!+8-!-FF- '+<  
 :F!) ,+'8- ;!,9; !\$9 ),+'8- ;!<& )\$(&!:9!+8-!M-%<&+ -9'- !:F!<+-%- :+?M?6!X,M-%!M%-<-9+-;!,+!+8-!>2!" !  
 ,99\$,(!':9F-%-9'- !:F!+8-!J ,<+-%9!X<?'8:(:K& ,(!7<<:'&,+&:9A!#, )Q%&;K-A!B 76!  
 S:(; \$' A!56A!B ,'. :9,(;A!O6X6V6A!78-,%9A!4656A!48--(-%A!J6J6A!g !. \$Q-A!46\*6!WE '+:Q-%!23"3Y6!  
 7<<-<&9K!M%-F-%-9'- !F:<:'&,(!&9+-%, '+&:9!&9!'8&(;%-9! I &+8!7P .<6!X,M-%!M%-<-9+-;!,+!+8-!S -%N<8&%- !  
 7<<:'&,+&:9!F:&%!S-8,U&:%!79,(?<&!,9;!G8-%,M?A!7 )8-%<+A!B 76!  
 #&U&:&9&RB :+,,A!#6A!#(%NA!\_6B6A!g!78-,%9A!4656!WE '+:Q-%!23"3Y6!. &FF-%-9+&,(!%-&9F:&%'- )-9+!:F!  
 M%: )M+-;!,9;!&9;-M-9;-9+!%-<M:9<-</!79!,(+-%9,+&U-!M%: '- ;\$%-!+!:;- '%-,<-!M%: )M+!; -M-9;-9' ?6!  
 X,M-%!M%-<-9+-;!,+!+8-!S -%N<8&%- !7<<:'&,+&:9!F:&%!S-8,U&:%!79,(?<&!,9;!G8-%,M?A!7 )8-%<+A!B 76!  
 #&U&:&9&RB :+,,A!#6A!#(%NA!\_6B6A!g!78-,%9A!4656!WE '+:Q-%!23"3Y6!9'%-,&9K!<N&(!, 'i\$&&:9!Q?!  
 M%:U&:&9K!;&FF-%-9+&,(!%-&9F:&%'- )-9+!F:&%!M%: )M+-;!,9;!&9;-M-9;-9+!%-<M:9<-<6!X:<+-%!M%-<-9+-;!,+!+8-!  
 S -%N<8&%- !7<<:'&,+&:9!F:&%!S-8,U&:%!79,(?<&!,9;!G8-%,M?A!7 )8-%<+A!B 76!  
 #: :NA!G6A!g!78-,%9A!4656A!WE '+:Q-%!23"3Y6!#: )M,%&9K!- '8:&!',9;!+Z+\$,(!M%: )M+<!F:&%!+- , '8&9K!  
 &9+,U-%Q,(!Q-8,U&:%6!

O:Q!9<:9A!B6J6A!.&'N<:9A!#676A!B,'.:9,(;A!O6X6V6A!g!78-,%9A!4656!WB,?!23"3Y6!X%-%-i\$&<&-!<N&(<!F:%(-,%9&9K!+8%:\$K8!U&;-!:):;-(&9K!%:(-!:F!;-(,-;!)&+,+&:9!,9;!;-,-;!),+'8&9K!X,M-%!M%-<-9+-;!,+!+8-!,99\$,(!':9F%-9'-!:F+8-!7<<:'&,+&:9!F:%!S-8,U&:%!79,(?<&<A!P,9!79+:9&:A!Gq6!

O:;%&K\$-^A!H6B6A!G8: )M<:9A!O656A!P'8(&'8-9)-?-%!\_6a6A!P+:'' :A!#6P6A!g!78-,%9A!4656!WB,?!23"3Y6!7<<-<<)-9+,9;!+%-,+)-9+:F!U:,(,!+<-%-:+?M?!!9!,9!,;\$(+!I&+8!) -9+,(%-+,%;,+&:96!X:<+-%!M%-<-9+-;!,+!+8-!,99\$,(!':9F%-9'-!:F+8-!7<<:'&,+&:9!F:%!S-8,U&:%!79,(?<&<A!P,9!79+:9&:A!Gq6!

P&9'(&%A!X676A!B'P I --9-?A!B6A!g!78-,%9A!4656!WB,?!23"3Y6!7<<-<<)-9+,9;!+%-,+)-9+:F!U:,(,!+<-%-:+?M?!!9!,9!,;\$(+!I&+8!) -9+,(%-+,%;,+&:96!X:<+-%!M%-<-9+-;!,+!+8-!,99\$,(!':9F%-9'-!:F+8-!7<<:'&,+&:9!F:%!S-8,U&:%!79,(?<&<A!P,9!79+:9&:A!Gq6!

PU-&9Qc:<:9<:9A!#676A!b\$&(8,%;&A!X6A!@&:9-((:R.-H:(FA!\_6B6A!a:9-<A!S6B6A!g!78-,%9A!4656!WB,?!23"3Y6!.-<'%&M+&U-!,<<-<<)-9+:FIM%:Q(-)Q-8,U&:%!9!%+,9<&:9<Q-+I--9!,'+&U&+&-<6!X,M-%!M%-<-9+-;!,+!+8-!,99\$,(!':9F%-9'-!:F+8-!7<<:'&,+&:9!F:%!S-8,U&:%!79,(?<&<A!P,9!79+:9&:A!Gq6!

S8,%\$'8,A!.6A!#&U;&9&R B:++,A!#6A!g!78-,%9A!4656!WE'+:Q-%!2330Y6!G%,&9&9K!c:&9+,++-9&:9!%-<M:9<-<!&9!+-9,K-<!\$&9K!<:'&,(!':9<-i\$-9'-<6!X,M-%!M%-<-9+-;!,+!+8-!S-%N<8&%-<7<<:'&,+&:9!F:%!S-8,U&:%!79,(?<&!,9;!G8-%,M?A!7)8-%<+A!B76!

#&U;&9&R B:++,A!#6A!#(%NA!\_6B6A!g!78-,%9A!4656!WE'+:Q-%!2330Y6!.&FF-%-9&:9F:&'-)-9+:F!M%: )M+-;!,9;!&9;-M-9;-9+!%-<M:9<-</79!,(+-%9,+&U-!M%: '-;\$\$%-!+!:;- '%-,<-!M%: )M+!;-M-9;-9'?'6!X,M-%!M%-<-9+-;!,+!+8-!S-%N<8&%-<7<<:'&,+&:9!F:%!S-8,U&:%!79,(?<&!,9;!G8-%,M?A!7)8-%<+A!B76!

#:(9A!#6A!\_&9<8,I A!B6A!79;%-c'^?NA!@6A!#(%NA!\_6B6A!PU-&9Qc:<:9<:9A!#6P6A!g!78-,%9A!4656!WE'+:Q-%!

!

"0

J((&:+A!P6A!@&QQ?A!B 6J 6A! 7 8-, %9A! 4 65 6A! g ! 4 -&<<A!a6P6!WE '+:Q-%!233>Y6! 7 ; ; \$' +&:9!/b-9-%, +&9K!9 :U-(  
 %-<M:9<-<6!X, M-%!M%-<-9+- ; !,+!8-!S -%N<8&%-!7 <<: '&, +&:9!F:&;%S-8, U&:%!79, (?<&!, 9; !G8-%, M?A!  
 7 ) 8-%<+A!B 76!  
 b&(-<A! 7 6A!O:<' :-A!J 6B 6A!X-9 '-A!P6G6A! g ! 7 8-, %9A! 4 65 6!WE '+:Q-%!233>Y6! 7 !# : ) M, %&:<9!:F!%- ; &%- ' +&:9!  
 I &+8!, 9; !I &+8:\$+!%-<M:9-<!&9+-%%\$M+&:9!F:&;%!- ; '\$+&9K!<+-%+&: ?M?! , +&9+, &9- ; !Q?!, \$+: ) , +&'  
 %-&9F:&;%'- ) -9+6!X, M-%!M%-<-9+- ; !,+!8-!S -%N<8&%-!7 <<: '&, +&:9!F:&;%S-8, U&:%!79, (?<&!, 9; !G8-%, M?A!  
 7 ) 8-%<+A!B 76!  
 b%9; (-A!P6A!P, %K-9+A!J 6A!B, ' . : 9, ( ; A!O6X6V6A! g ! 7 8-, %9A! 4 65 6!WE '+:Q-%!233>Y6! 7 !Q-8, U&:, (!-Z, ) &9, +&:9!  
 :F!F, (<-!Q-(&F+, <N<"!X, M-%!M%-<-9+- ; !,+!8-!S -%N<8&%-!7 <<: '&, +&:9!F:&;%S-8, U&:%!79, (?<&!, 9; !  
 G8-%, M?A! 7 ) 8-%<+A!B 76!  
 @-Q: I &+^A!a6@6A!#(,%NA!\_6B 6A! g ! 7 8-, %9A! 4 65 6!WE '+:Q-%!233>Y6!G8-!-FF- ' +<!:F!U-%Q, (!:M-%, 9+!%, +&9K! g !  
 %-<M:9<-!&9+-%%\$M+&:9!%- ; &%- ' +&:9!:9!, MM%:M%&, +-!g !\$9; -<&, Q(-!U: ', (&^, +&:9<6!X:<+-%!M%-<-9+- ; !,+!8-!  
 S -%N<8&%-!7 <<: '&, +&:9!F:&;%S-8, U&:%!79, (?<&!, 9; !G8-%, M?A! 7 ) 8-%<+A!B 76!  
 B , 8:9- ?A!X6A! 4 -&<A!a6P6A!@&QQ?A!B 6J 6A! g ! 7 8-, %9A! 4 65 6!WE '+:Q-%!233>Y6! 7 9, (?<&!:F!M%: ) M+&9K!-%&: %<  
 +8, +!%-<\$(+!&9!; -(&? -!; !' i\$&<&:9!:F!M(, ?!<N(&(!' 8, &9<!&9!' 8&(%-9! I &+8!, \$+& ) 6!X, M-%!M%-<-9+- ; !,+!8-!  
 S -%N<8&%-!7 <<: '&, +&:9!F:&;%S-8, U&:%!79, (?<&!, 9; !G8-%, M?A! 7 ) 8-%<+A!B 76!  
 B : :%-A!\_6A! . , <89- %A!a6A!#(,%NA!\_6B 6A! g ! 7 8-, %9A! 4 65 6!WE '+:Q-%!233>Y6!J FF- ' +<!:F!<-9:&? !&9+-K%, +&:9!:9!  
 , \$+: ) , +& ', ((?%-&9F:&;%'- ; !) : +&:, 9; !U: ', (!<+-%+&: ?M?6!X:<+-%!M%-<-9+- ; !,+!8-!S -%N<8&%-!7 <<: '&, +&:9!  
 F:&;%S-8, U&:%!79, (?<&!, 9; !G8-%, M?A! 7 ) 8-%<+A!B 76!  
 O:Q&9<:9A!B 6J 6A!B, ' . : 9, ( ; A!O6X6V6A! g ! 7 8-, %9A! 4 65 6!WE '+:Q-%!233>Y6!G8-!-FF- ' +<!:F!U-%Q, (!:M-%, 9+!%, +&9K! :9!  
 +8-!U: ', (!<+-%+&: ?M?!, 9; !, MM%:M%&, +-!(, 9K\$, K-6!X:<+-%!M%-<-9+- ; !,+!8-!S -%N<8&%-!7 <<: '&, +&:9!F:&;%  
 S -8, U&:%!79, (?<&!, 9; !G8-%, M?A! 7 ) 8-%<+A!B 76! !!!  
 O:Q&9<:9A!B 6J 6A!B, ' . : 9, ( ; A!O6X6V6A! g ! 7 8-, %9A! 4 65 6!WE '+:Q-%!233>Y6!J ZM(:&9K!, !M:<&Q(-!%-(&:9<8&M!  
 Q-+I--9!; -(&? -!; !, +'8R+:R<, ) M(-!, 9; !M-%F%: ), 9'-!; 9!U&: -! ) : ; -(&9K6!X:<+-%!M%-<-9+- ; !,+!8-!  
 S -%N<8&%-!7 <<: '&, +&:9!F:&;%S-8, U&:%!79, (?<&!, 9; !G8-%, M?A! 7 ) 8-%<+A!B 76!  
 O:<':-A!J 6B 6A!X-9 '-A!P6G6A!S :\$%%-+A!a6#6A! g ! 7 8-, %9A! 4 65 6!WE '+:Q-%!233>Y6!O-(, +&U-!' :9+&Q\$+&:9<  
 :F!+8--!; -<'%&M+&U-!) -+8: ; <!! ) M(&, +&:9!F:&;%Q-8, U&:%, (!, <<-<) -9+6!X, M-%!M%-<-9+- ; !,+!8-!  
 S -%N<8&%-!7 <<: '&, +&:9!F:&;%S-8, U&:%!79, (?<&!, 9; !G8-%, M?A! 7 ) 8-%<+A!B 76! !  
 4 &(&F:&;%A!G6A!#(,%NA!\_6B 6A! g ! 7 8-, %9A! 4 65 6!WE '+:Q-%!233>Y6!G8-!-FF- ' +<!:F!<: '&, (!%-&9F:&;%'- ) -9+!  
 :9!+8-!, ' i\$&<&:9!:F!<: '&, (!<N(&(!' 8&(%-9! I &+8!, \$+& ) 6!X:<+-%!M%-<-9+- ; !,+!8-!S -%N<8&%-!  
 7 <<: '&, +&:9!F:&;%S-8, U&:%!79, (?<&!, 9; !G8-%, M?A! 7 ) 8-%<+A!B 76! !!  
 7 8-, %9A! 4 65 6!W B, ?!233>Y6!! 7 ; ; %<<&9K!+8-!8, ((-9K&9K!Q-8, U&: %!F!, ; :(-' -9+<! I &+8!, \$+& ) /!!  
 P\$ '' -<&F!(\$!M%: , '+&U-!) -+8: ; <!, 9; !N&((<!Q\$&(&9K&9+-%U-9+&:9<6! 9U&+&: !, ; ; %<<!' 8, &%- ; !,+!8-!, 99\$, (!  
 : 9U-9+&:9!:F!+8-!7 <<: '&, +&:9!F:&;%S-8, U&:%!79, (?<&A!#8&', K:A!@6!!  
 7 8-, %9A! 4 65 6!W B, ?!233>Y6!!yS 6V6!PN&99-%!(-'+\$%-y! j \$, 9+&F&9K!+8-!i \$, (&+, +&U-!/J) M&& ', (!) - , <\$%-<!:F!  
 <: '&, (!&9F:&;%), +&:9!M%: '-<&9K!&9!, \$+& ) 6! 9U&+&: !, ; ; %<<!' 8, &%- ; !,+!8-!, 99\$, (!' : 9U-9+&:9!:F!+8-!  
 7 <<: '&, +&:9!F:&;%S-8, U&:%!79, (?<&A!#8&', K:A!@6!!  
 7 8-, %9A! 4 65 6!W B, ?!233>Y6!!JZ, ) &9, +&:9!:F!; , +!, 9, (?<&!) -+8: ; <6!P? ) M:<&\$ ) !; &<'\$<<- ; !,+!8-!, 99\$, (!  
 ' : 9U-9+&:9!:F!+8-!7 <<: '&, +&:9!F:&;%S-8, U&:%!79, (?<&A!#8&', K:A!@6!!  
 7 8-, %9A! 4 65 6!W B, ?!233>Y6!!G%- , +) -9+!:F!M- ; &+&: 'F-- ; &9K!; &<: %; -<!E\$+' : ) -! ) - , <\$%-<!:F!; &FF%-9+!  
 M%:K, ) <!, %: \$9; !+8-!' : \$9+&6!P? ) M:<&\$ ) !; &<'\$<<- ; !,+!8-!, 99\$, (!' : 9U-9+&:9!:F!+8-!7 <<: '&, +&:9!F:&;%  
 S -8, U&:%!79, (?<&A!#8&', K:A!@6!  
 #:(;9A!#6A! 7 8-, %9A! 4 65 6!#(,%NA!\_6B 6A! g !B , <, (<N?A!a6!W B, ?!233>Y6!!G8-!-FF- ' +<!:F!+, ' +!%, +&9K! , 9; !  
 %<<M:9<-!&9+-%%\$M+&:9!%- ; &%- ' +&:9!:9!, MM%:M%&, +-!, 9; !\$9; -<&, Q(-!U: ', (&^, +&:9<6!X, M-%!M%-<-9+- ; !,+!  
 +8-!, 99\$, (!' : 9U-9+&:9!:F!+8-!7 <<: '&, +&:9!F:&;%S-8, U&:%!79, (?<&A!#8&', K:A!@6!



78-, %9A! 4 6 5 6!W 7 \$K\$<+!233CY6!! . -<'%&M&U-!, 9; !-ZM-%& ) -9+, (!, 9, (?<-!: F!'%&F', (!': ) M: 9-9<!: F!J`S`!F: %! '8&(; -9! I &+8! 7P . <6!P? ) M:<&\$ ) !'8, &% - ; !, +!8-!D+8! 9+-%9, +&: 9, (!# : 9F- -9' - !: F!+8-! 7 <<: '&, +&: 9!F: %! S-8, U:&!: 79, (?<&A!P? ; 9- ?A! 7 \$<+, (&, 6!

78-, %9A! 4 6 5 6! # (,%NA! \_6B 6A! B , <, (<N?A! a6A! g ! \_&9K- %?A! P6! W 7 \$K\$<+!233CY6! \* : ', (!<+-% - : +?M?A!% - i\$- <+&9KA! , 9; !': ) -9+&9K!/V%: ) !M\$%-(!U: ', (!+: U: ', (!U- %Q, (!Q- 8, U:&!: 6!X, M- %!M%- <-9+ - ; !, +!8-!D#\$! 9+-%9, +&: 9, (! # : 9F- -9' - !: F!+8-! 7 <<: '&, +&: 9!F: %! S-8, U:&!: 79, (?<&A!P? ; 9- ?A! 7 \$<+, (&, 6!

78-, %9A! 4 6 5 6! WE '+: Q- %!233CY6! X- %<: 9, (!M, %, ; &K ) !<8&F+<!, 9; !+%- , +) -9+, ''-M+, Q&(&?/! 7 !': ) M, %&<: 9!: F! XSP!, 9; !7 S 7 !-ZM-% <+6!E%, (!M%- <-9+ , +&: 9! '8, &% - ; !, +!8-!S- %N<8&% - !7 <<: '&, +&: 9!F: %! S-8, U:&!: 79, (?<&! , 9; !G8- %, M?A! 7 ) 8- %<+A! B 7 !

78-, %9A! 4 6 5 6! WE '+: Q- %!233CY6! O-F&9- ) -9+<&9! &9+-%: Q<-%U- %!, K%- - ) -9+! ; , +!, 9, (?<&A!F\$9' +&: 9, (! , 9, (?<&A!M%- F- % -9' - !, <<- <<) -9+A! , 9; !+%- , +) -9+! : F!M%: Q( - ) !Q- 8, U:&!: 6!P? ) M:<&\$ ) !'8, &% - ; !, +!8- ! S- %N<8&% - !7 <<: '&, +&: 9!F: %! S-8, U:&!: 79, (?<&!, 9; !G8- %, M?A! 7 ) 8- %<+A! B 7 !

78-, %9A! 4 6 5 6! WB , ?!233LY6! X- % - U- 9+&9K! - < , M- !M%- U- 9+&: 96!X, M- %!M%- <-9+ - ; !, +!8- !, 99\$, (!': 9U- 9+&: 9!: F! +8- ! 7 <<: '&, +&: 9!F: %! 7 MM(& - ; !S- 8, U:&!: 79, (?<&A!P, 9!V%, 9'&': 6!

78-, %9A! 4 6 5 6! # (,%NA! \_6! B 6A! # \$8\$9KA! S 6A! b , %; -9&- %! H6A! g ! B , ' . : 9, ( ; A! O6! WB , ?!233LY6! G%- , +&9K! U: ', (! <+-% - : +?M? ! I &+8!% - < M: 9<- !% - ; &% - +&: 9!, 9; !<+& ) \$(< !': ) M- +&: 96!X, M- %!M%- <-9+ - ; !, +!8- !, 99\$, (! ': 9U- 9+&: 9!: F!+8- ! 7 <<: '&, +&: 9!F: %! 7 MM(& - ; !S- 8, U:&!: 79, (?<&A!P, 9!V%, 9'&': 6!

# (,%NA! \_6! B 6A! V(: -9+&9: A! # 6A! G: ) - ?A! J 6A! <: 9: A! e 6A! B - +^K- %A! a6A! g ! 78- , %9A! 4 6 5 6! WB , ?!233LY6!

#: ) M, %&<: 9!: F! 8&K8(?!M%- F- % - ; !) , +'8- !, 9; !\$9) , +'8- !; !<+& ) \$(&!: 9! <+-% - : +?M? !&9! <+& ; -9+! I &+8!

; -U- ( : M ) -9+, (!; & , Q&(& - <6!X: <+-%!M%- <-9+ - ; !, +!8- !, 99\$, (!': 9U- 9+&: 9!: F!+8- ! 7 <<: '&, +&: 9!F: %! 7 MM(& - ; !S- 8, U:&!: 79, (?<&A!P, 9!V%, 9'&': 6!

78-, %9A! 4 6 5 6! WH: U- ) Q- %!2332Y6!! J, +&9K! &9! '8&(; -9! I &+8!, \$+& ) !< M- %!\$ ) !; & <: %; - %! . &% - ' +!, 9; !

9, +\$%, (& & !', <<- <<) -9+! <+%, + -K& - <6!X, M- %!M%- <-9+ - ; !, +!8- !' 9, \$K%, (! 4 : %; !7 \$+& ) !#: 9F- -9' - A!

B - ( Q: \$9- 6!

78-, %9A! 4 6 5 6! WE '+: Q- %!2332Y6!! . - '% - , &9K! U: ', (!<+-% - : +?M? !&9! &9; &U& ; \$, (< ! I &+8!, \$+& ) !< 6!X, M- %!M%- <-9+ - ; !

, +!8- !, 99\$, (! ) --+&9K! : F!+8- ! S- %N<8&% - !7 <<: '&, +&: 9!F: %! S-8, U:&!: 79, (?<&!, 9; !G8- %, M?A! 7 ) 8- %<+A!

B 7 !

# , <&9- A! G6! B 6A! @ : ' N I : : ; A! @ 6A! X- %8 : +A! H6A! g ! 78- , %9A! 4 6 5 6! WE '+: Q- %!2332Y6!! J Z- 9; - ; !F\$9' +&: 9, (! , 9, (?<&!, 9; !+%- , +) -9+! : F!P` S! ) , &9+, &9- ; !Q?!, ''- <<+! : % - <+%, &9+! X, M- %!M%- <-9+ - ; !, +!8- !, 99\$, (! ) --+&9K! : F!+8- ! S- %N<8&% - !7 <<: '&, +&: 9!F: %! S-8, U:&!: 79, (?<&!, 9; !G8- %, M?A! 7 ) 8- %<+A! B 7 !

B - +^K- %A! a6A! 78- , %9A! 4 6 5 6! J; &9Q\$%KA! P6A! g ! B , ; ; -9A! P6! 7 !F\$9' +&: 9, (!, 9, (?<&!, F! <+-% - : +?M? ! / . &% - ' + - ; !

<M&+&9K!, 9; !<M&+!M( , ?6!X: <+-%!M%- <-9+ - ; !, +!8- !, 99\$, (! ) --+&9K! : F!+8- ! S- %N<8&% - !7 <<: '&, +&: 9!F: %!

S- 8, U:&!: 79, (?<&!, 9; !G8- %, M?A! 7 ) 8- %<+A! B 7 !

B : : - A! G6A! a: 89<: 9A! # 6A! g ! 78- , %9A! 4 6 5 6! G8- !- FF- ' +<: F!, !<-(FR) , 9, K- ) -9+! +&: 9, !N, K- !: 9! +8- !

<+-% - : +?M? ! I Q- 8, U:&!: F!, !?: \$9K!) , 9! I &+8!, \$+& ) !6!X: <+-%!M%- <-9+ - ; !, +!8- !, 99\$, (! ) --+&9K! : F!+8- !

S- %N<8&% - !7 <<: '&, +&: 9!F: %! S-8, U:&!: 79, (?<&!, 9; !G8- %, M?A! 7 ) 8- %<+A! B 7 !

78-, %9A! 4 6 5 6! g ! # : 9; : 9A! a6A! WB , ?!2332Y6! G%- , +&9K! M- ; &, +&: ' F- - ; &9K! M%: Q( - ) </!@ : 9KR- - % ) !F: (( : I R\$M6!!

X: <+-%!M%- <-9+ - ; !, +!8- !, 99\$, (!': 9U- 9+&: 9!: F!+8- ! 7 <<: '&, +&: 9!F: %! 7 MM(& - ; !S- 8, U:&!: 79, (?<&A!

G: %: 9+ : 6!

78-, %9A! 4 6 5 6! g ! . -Q, %A! O6! WB , ?!2332Y6! G8- !- FF- ' +<: F!: M- 9!, 9; !' (: <- ; !- ' : 9: ) & <: 9!M- %F: % ) , 9' - !&9!

, !) , +'8&9KR+ : R<, ) M(- !+ , <N6!X: <+-%!M%- <-9+ - ; !, +!8- !, 99\$, (!': 9U- 9+&: 9!: F!+8- ! 7 <<: '&, +&: 9!F: %! 7 MM(& - ; !

S- 8, U:&!: 79, (?<&A! G: %: 9+ : 6!

78-, %9A! 4 6 5 6! . \$Q- 6! 4 6! \* 6A! B `^(U, 9- A! 4 6! a6A! # (,%NA! \_6! B 6A! g ! b , %; -9&- %A! H6! # 6! WB , ?!2332Y6! . &%\$M+&9K!

<+-% - : +?M? ! I &+8! \* G! &: ) \$(&!: -(&U- %?/ !7 !+ - <+! : F! Q- 8, U:&!: , (! ) : ) -9+! \$ ) !6!X, M- %!M%- <-9+ - ; !, +!8- !, 99\$, (!

': 9U- 9+&: 9!: F!+8- ! 7 <<: '&, +&: 9!F: %! 7 MM(& - ; !S- 8, U:&!: 79, (?<&A! G: %: 9+ : 6!

78-,%9! 4 6! 5 6! g !@\$9; I ,((! 7 6!WB ,?2332Y6!G8-!-FF- '+!:F!-<+& ) ,+-! ) -+8: ;!:9!F\$9 '+&:9,(!,9,(?<&!  
:\$+' : ) -/!X,%+&, (R&9+-%U,(!U<6! ) : ) -9+,%?+& ) -R<, ) M(&9K6!X:<+-%!M%-<-9+- ;!,+!8-!,99\$,(!':9U-9+&:9!:F!  
+8-!7<<: '&, +&:9!F:%!7MM(&- ;!S-8,U&:%!79,(?<&A!G:%:9+:6!  
\* +"#, -&'. )'! )'"8MN?C6", '9: : ; >"\*AA"AA5-0'#-@?', "#?5-0'A?", "C?%P%'5-'N+5\$@, "-'Q5?+'#F?5AB'AP"N?,FB'  
@5AC,@", )'R#P", 'P, "A"-?"@'#?'?+'''#--F#\$'B""?5-0'C0"?+'''2", SA+5, '''\*AACN5#?5C-'0C,'2"+#G5C,  
\* -#\$\$A5A'#!-@'T+", #P%&'\*B+", A?&'7\*)'

\* + "#, -&'. )! )'8 7 #%'9: : : <)'=00"N?C0'?QC'B"?+C@A'C0'5-?, C@FN5-0'0CC@A'C-'#NN"P?#-N'"C0'P, "G5CFA\$%'  
 , "E"N?"@'5?"BA)R#P", 'P, "A"-?"@'#?+""#--F#\$'B""?5-0'C0'?+""\*AACN5#?5C-'0C, '2"+#G5C, '\* -#\$%A5A&  
 . #A+5-0?C-&'X)Y)"  
 \* + "#, -&'. )! )&Y#\$5AC-&T)&3'M, ?B#-&7)'8\*FOFA?9: : : <)'2"+#G5C, #\$\_?", "#?B"-?'C0'0CC@A\$\$N?5G5?%5-'  
 #N+5\$@'Q5?+'#F?5AB) 'R#P", 'P, "A"-?"@'#?; ; th'. C,\$@'YC-0, "AA'C0'?+""H-?", -#?5C-#\$'\*AACN5#?5C-'0C,  
 ?+""VN5"-?505N'V?F@%C0'H-?"\$\$N?F#\$'X5A#65\$5?5"A&V"#???"&'. \*)'  
 78-, %9A! 4 6! 5 6! WB , ?!2333Y6!<<\$-<!F, '&9K!'(&9&'&, 9<!+-, +&9K!M-; &, +&'!F--; &9K!; &:&; -%<6!!!  
 X, 9-(!; &<\$<&: 9!M%-<-9+-; !, +!8-!, 99\$, (!) --+&9K!: F!+8-!7 <<: '&, +&: 9!F: %!S-8, U&:&!79, (?<&<!  
 4 , <8&9K+: 9A!. 6#6!  
 78-, %9A! 4 6! 5 6! WB , ?!2333Y6!JFF- '+: F!+ I :!) -+8: ; <!: F!&9+%; ; \$'&9K!F: : ; <!: 9!, ''-M+, 9'-!: F!!  
 X%-U&:\$<(?!%-c- '+-; !&+- ) <6!X, M-%!M%-<-9+-; !, +!8-!, 99\$, (!) --+&9K!: F!+8-!7 <<: '&, +&: 9!F: %!S-8, U&:&!79, (?<&<!  
 x, (-N, A! 7 6A! b : \$(; A!. 6! . 6! g !7 8-, %9A! 4 6! 5 6! WE '+: Q-%!2333Y6! 9+-%<M-%<, (!M%: '-; \$%-!/P?<+- ), +&'  
 %-M(&', +&: 9!: F!M%-U&:\$<!%-<-, %'86)X:<+-%!M%-<-9+-; !, +!8-!, 99\$, (!) --+&9K!: F!+8-!S- %N<8&%-!7 <<: '&, +&: 9!  
 F: %!S-8, U&:&!79, (?<&<!, 9; !G8-%, M?A! 7 ) 8-%<+A!B 76!  
 78-, %9A! 4 6 5 6! WE '+: Q-%!"000Y6!S-8, U&:&!9, (?&!', <<-<<) -9+!, 9; !+-, +) -9+!: F!M-; &, +&'!F--; &9K!  
 ; &:&; -%<6!X, M-%!M%-<-9+-; !, +!8-!, 99\$, (!) --+&9K!: F!+8-!S- %N<8&%-!7 <<: '&, +&: 9!F: %!S-8, U&:&!79, (?<&<!  
 , 9; !G8-%, M?A! 7 ) 8-%<+A!B 76!  
 78-, %9A! 4 6 5 6! g !X:+-%A!X6!WE '+: Q-%!"000Y6!J <+, Q(&<8&9K! I -&K8+!K, &9!&9!, !F, &(&9KR+: R+



78-,%9A! 4 65 6! g !5&9-(&9-A!X6H6!WB , ?!"00LY6!VO!U-%<\$<! \*O!<'8- ;\$(-<! 7 !+-<+:F!K- : ) -+&'!, U-%, K&9K!, <! ,!M%- ;&'++U-! ; -<'%&M+:%!:F!'8:&' -6!X, M-%!M%-<-9+- ;!, +!+8-!, 99\$, (!) --+&9K!:F!+8-!7 <<: '&, +&: 9!F:%! S-8, U&:%! 79, (?<&A!#8&', K:A!@6!

78-,%9A! 4 65 6!WB , ?!"00LY6!P'&9'-A!M<?'8:(:K?A!, 9; !&9+-%M%-+&U-!Q-8, U&:%%<) 6!X, M-%!M%-<-9+- ;!, +!+8-! ,99\$, (!) --+&9K!:F!+8-!7 <<: '&, +&: 9!F:%!S-8, U&:%! 79, (?<&A!#8&', K:A!@6!

78-,%9A! 4 65 6! g !5&9-(&9-A!X6H6!W"002Y6!#8:&' -!Q-+ I --9!F&Z- ;!, 9; !Q&RU, (\$- ;!%, +&: 9!<'8- ;\$(-<6!X, M-%! M%-<-9+- ;!, +!+8-!, 99\$, (!) --+&9K!:F!+8-!J, <+-%9!X<?'8:(:K&', (!) 7 <<: '&, +&: 9A!S :<: 9A!B 76!

78-,%9A! 4 65 6! g !5&9-(&9-A!X6H6!WB , ?!"002Y6!#8:&' -!Q-+ I --9!Q&RU, (\$- ;!W ) &Z- ;Y!, 9; !F&Z- ;!U, (\$- ! <'8- ;\$(-<!:F!%-&9F:%' - ) -9+!9!, !' 9 '\$%%-9+!8, &9<!M%: '- ;\$%-!/G8-!<&K9&F&', 9'-!:F!%, 9K-6!X, M-%! M%-<-9+- ;!, +!+8-!, 99\$, (!) --+&9K!:F!+8-!7 <<: '&, +&: 9!F:%!S-8, U&:%! 79, (?<&A!P, 9!V%, 9'&<':A!# 76!

78-,%9A! 4 65 6! g !5&9-(&9-A!X6H6!WB , ?!"002Y6!#8:&' -!Q-+ I --9!U, %% , Q(-!, 9; !F&Z- ;!%, +&: !<'8- ;\$(-<!:F!! ! %-&9F:%' - ) -9+!/G8-!-FF- '+<!:F!+&% , +&9K!M&K- :9<!Q-+ I --9+ I :! ; -M%&U, +&: 9!(-U-(<6!X:<+-%!M%-<-9+- ;!, +! +8-!, 99\$, (!) --+&9K!:F!+8-!7 <<: '&, +&: 9!F:%!S-8, U&:%! 79, (?<&A!P, 9!V%, 9'&<':A!# 76!

78-,%9A! 4 65 6!WB , ?!"002Y6!G8-!) &<\$<, K-!:F!+8-!+-%) !%, +&: 9, (&+?Q?<'&-9'-6!X, M-%!M%-<-9+- ;!, +!+8-! ,99\$, (!) --+&9K!:F!+8-!7 <<: '&, +&: 9!F:%!S-8, U&:%! 79, (?<&A!P, 9!V%, 9'&<':A!# 76!

78-,%9A! 4 65 6! 5&9-(&9-A!X6H6! g ! . , U&:A!V6b6!W"00"Y6!X%-F--9'-!F: %!&<N!&9!&+\$, +&: 9<!:F!\$9' -+, &9+?6!! X, M-%!; -(&U-%- ;!, +!+8-!, 99\$, (!) --+&9K!:F!+8-!J, <+-%9!X<?'8:(:K&', (!) 7 <<: '&, +&: 96!

!