

!

!

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

. /012+34+!5/+6789!

5:

+T,7!F9!f+g!K,7+/,H!+4+,Hh7!+4!3EEI 7!9!/6/9T,7?!9/+,,,H!+48: 9!/34!C/3F34Q;!fTg!6/7E74F!/7,7L+4F!
34C9/? +F394!+48!387+E!34!+4!9/Q+43h78!C+E2394!9/+,,,H!+48: 9!/34!C/3F34Q;!fKg!87L7,96!+48!7d6/7EE!

!

e+EF,H!c7!+,!4778f9f748k+/7c1,,Hf9f77634Q!,347E!9c!K9?? I 43K+F394!96740!Z!c3,,!c9/Pf9K2+,,74Q7!H9! I
+E!?! I K2!+E!Z!K+4!c3f29f!F9L7/c27,?34Q!H9!0!59!E 669/F!H9! /!6/9Q/7EE!F2/9! Q29! Ff27!K9! /E7;!Z!6,+4!F9!
K27Kp!34f2/9! Q29! Ff27!E7? 7EF7/;!49f!94,Hf9!?! +P7!E! /7!H9! l/7!P77634Q!l 6!c3f2f27!7+834Q!+48!c/3f34Q!
T! Ff9!?! +P7!E! /7!F2+!F!H9! !+/7!8934Q!c7,,0!S48!c274!H9! p/7!49f!F9!27,6!H9! !c348!F27!E! 669/F!H9! I
47780 [+f374K7q !c3f2!947E7,C!+48!c3f2!9f27/Eq !3E!K/3f3K+,!c9/!+!E! KK7EEC! ,!,7+/434Q!7d67/374K70!

!

Z4!+883f394!f9!K9? 6,3+4K7!c3f2!o7E23L+!i 43L7/E3FH!E!M987!9C!M948! Kf;!34!F23E!K9! /E7;!E!F! 874FE!c3,,!T7!
7d67KF78!F9=!

! "#\$%&'()*+),-./:;?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
F2+!6/76+/+f394!TH!7C7//34Q!F9!7L3874K7!C/9? !F7dFE!+48!9F27!/7E7+/K2!94!F27!F963K9!/3EE! 7!F9!
EF3? I ,+F7!+!F29! Q2FC! ,!c7,,V/7+E9478!7dK2+4Q7!9C!387+E0!
0, (&/&\$%/, ' % - / . & (* (- /&\$%\$11\$* & (2\$34!34!+!/+4Q7!9C!K9,,+T9+/F3L7!83EK! EE394E!f947V94V947;!34!Q/9! 6E;!+48!
F7+K27/V,78g!c3f2!H9! /!677/E;!T! 3,834Q!94!9F27/E!l!387+E!+48!7d6/7EE34Q!F273/9C4!K,7+/,H!+48!
67/E! +E3L7,H0!

5\$*678. \$\$%\$\$. / . (: % , 2(. " , # \$, & ! M 7 , ! 6 2 9 4 7 E ! ? 9 T 3 , 7 ! 8 7 L 3 K 7 E ! 9 ! / , + 6 F 9 6 E ! ? + H ! 4 9 F ! ! E 7 8 ! 8 ! / 3 4 Q ! K , + E E 0 ! Z C !
H9! !2+L7!+4!+KK9?? 98+f394!,7ff7/;!6,7+E7!?! +P7!+!?! 77f34Q!F9!83EK! EE!8! /34Q!F27!C3/EF!c77P!9C!K,+EE0!o9! I
c3,,!4778f9!2+L7!2+/8!K9637E!9C!F27!7+834Q!?! +F7/3+,E!34!K,+EE!+48!F+P7!49F7E!TH!2+480S,,!K9! /E7!
? +F7/3+,E!E,387E;!+48!2+489! FE!c3,,!T7!+L+3,+T,7!94!M+4L+E!+48!K9637E!c3,,!T7!83EF/3T! F780!
<\$#",)&./&\$%&' ,)(' \$./&\$%3/)). ""#%&' , ' +*&f9!742+4K7!H9! /!+K+87? 3K!7d67/374K7!+48!F2+f!9C!H9! /!
K9,,7+Q! 7E0!Z!4!6+/F3K! ,+;!H9! !+/7!+EP78!F9!K94F/3T! F7!F9!F27!,7+/434Q!74L3/94? 74F!TH!T734Q!6/9? 6F!+48!
K9! /F79! E;!49F!7+f34Q!8! /34Q!K,+EE!+48!49F!C+,P34Q!34!+48!9! F!9!/F+,P34Q!34+66/96/3+f7,H!9!/9! F!9C!F! /40!
=\$) -\$*%&' +. %(&\$%": \$&6\$. 0!SF!+!7E7+/K2!l 43L7/E3FH!E! K2!+E!o! ;!34EF/! Kf9/E!2+L7!?! +4H!7E694E3T3,3f37E!
+48!87? +48E!94!F273!F3? 7!34!+883f394!f9!F7+K234Q!+48!F27H!+/7!49F!+L+3,+T,7!F9!E!F! 874FE!+F!+,,!F3? 7E0!
D7/7!+/7!E9? 7!?! 7F298E!9C!7E67KF34Q!H9! /!34EF/! Kf9/p!E!F3? 7!f+48!H9! /Eg!9! FE387!9C!K,+EE!

- o B/34Q!C9K! E78!]! 7EF394E!c274!H9! !+FF748!9CC3K7!29! /E!+48!T7!E! /7!F9!K94F+Kf!H9! /!34EF/! Kf9!/34!+!
F3? 7,H!C+E2394!3C!H9! !c3,,!49F!T7!+T,7!F9!P776!+!EK278! ,78!+66934F? 74F0!
- o O274!c/3f34Q!+4!7? +3,;!T7!E! KK34Kf!+48!6/7E74F!H9! /!]! 7EF394E!+E!K,7+/,H!+E!69EE3T,7!+/,C+HE!E7!+4!
+66/96/3+f7!F947;!E3Q4!H9! /!4+? 7;!+48!6/99C/7+8!H9! /!7? +3,E0!
- o SL938!7? +3,34Q!H9! /!34EF/! Kf9!/!+T9! F!?! +FF7/E!F2+F!K+4!T7!+88/7EE78!34!67/E94!T7C9/7!9!+CF7!/!K,+EE0!

!

!

SK+87? 3K!83E2947EFH!3E!l 4+KK76F+T,7!+48!c3,,!49F!T7!F9,7+/f78!+!F!o7E23L+!i 43L7/E3FH!M27+f34Q!c9/Q7/H!
83E2947EF!K948! Kf;!+48!6,+Q3+/3E?!7/987!o! IE!78! K+f394+,!7E7+/K2!+48!E9K3+,!EF+48+/8E0!527H!87L+, I 7!
F27!,7+/434Q!7d67/374K7!+48!3FE!,7Q3F3? +KH!49F!94,H!C9!/F27!67/67F+/F9/E!T! F!C9!/F27!74F3/7!K9? ? I 43FH0!ZF!3E!
3? 67+/f3L7!F2+f!H9! !C+? 3,3+/3h7!H9! /E7,C!c3f2!o! IE!SK+87? 3K!Z4F7Q/3FH!1F+f7? 74F!+, 94Q!c3f2!F23E!EH,,+T! E0!
ZF!3E!7EE74F3+,!F2+f!+,,!?! 7? T7/E!9C!9! /!+K+87? 3K!K9? ? I 43FH!E! TEK/3T7!F9!F27!387+,!9C!+K+87? 3K!34F7Q/3FH!
+48!+KK76F!3483L38! +,!7E694E3T3,3FH!C9!/F273!/C9/P0!134K7!6,+Q3+/3E? !3E!+!E7/39! E!F/+4EQ/7EE394!9C!7F23KE!
+4H!34EF+4K7E!9C!6,+Q3+/3E?!c3,,!T7!6! /E! 78!F2/9! Q2!F27!+66/96/3+f7!83EK36,34+/H!K2+447,E!+,,!34EF+4K7E!9C!
6,+Q3+/3E?!+7!769/F78!F9!F27!. 7+4!+48!?! +H!T7K9? 7!+!6+/F!9C!H9! /!67/? +474F!C3,70! [74+,f37E!C9!
6,+Q3+/3E?!+4Q7!C/9?!7K73L34Q!+!C+3,34Q!Q/+87!94!F27!7EE+H!F9!/7K73L34Q!+!C+3,34Q!Q/+87!C9!/F27!K9! /E7;!9EE!
9C!2949/E!E! E674E394;!9!/7L74!7d6! ,E394!C/9?!EK299,0!

!

[,+Q3+/3E?!? 7+4E!?! 3E/76/7E74F34Q!E9? 7947!7,E7!E!c9/8E!9!/387+E!f9!/F27!c9/8E!9!/387+E!6/98! K78!TH!S0Z0!
,3P7!\$ [5g!+E!H9! /!9C40! [,+Q3+/3E?!K+4!T7!+4!+Kf!9C!87,3T7+/f7!C/+! 8;!E! K2!+E!F! /434Q!34!c9/P!c29,,H!9!
6+/F3+,,H!K! FV+48V6+EF78!C/9? !F27!34F7/47F!+E!H9! /!9C4!?! 3E! E7!9C!+/F3C3K3+,!34F7,,3Q74K7!f!S0Z0!f!7K249,9QH!
,3P7!M2+f\$ [5!f87F+3,E!T7,9Cg;!9/!3F!?! +H!T7!+4!34+8L7/F74F!7//9;!E! K2!+E!C9/Q7F34Q!F9!K3F7!+!E9! /K7!c29E7!
387+E!H9! !6+/+62/+E78!9!/? 7+4F!F9!]! I 9F70!S,F29! Q2!+,,!34EF+4K7E!?! +H!49F!/7K73L7!F27!E+? 7!674+,FH!F27E7!
+/7!+,,!c9/? E!9C!6,+Q3+/3E? !+48!H9! !+/7!7d67KF78!F9!P49C!+48!F+P7!7E694E3T3,3FH!C9!/H9! /!c/3f34Q!+48! E7!
9C!9! FE387!E9! /K7E0!

!

523E!K9! /E7!C9,,9C!E!o7E23L+!i 43L7/E3FH!E!SK+87? 3K!Z4F7Q/3FH! [9,3KH!94!+/F3C3K3+,!34F7,,3Q74K7!f!S0Z0!527!E7!
9C!generative +/F3C3K3+,!34F7,,3Q74K7!9!+4H!6,+FC9/? !c3f2!Q747/+f3L7!+/F3C3K3+,!34F7,,3Q74K7!K+6+T3,3f37E!3E!

6/923T3F78!34!F23E!K9I /E7!527!! E7!9C!assistive!+/F3C3K3+,!34F7,,3Q74K7q 34K,I 834Q!Q/+?? ?+/!K27KP7/E;!E67,,!
K27KP7/E;!+48!83Q3F+,!F27E+I /I E7Eq 3E!+, ,9c78! [/7V+66/9L78!+EE3EF3L7!SZ!6,+FC9/? E!34K,I 87!E67,,!K27KP7/E!
+48!Q/+?? ?+/!K27KP7/E!34!k3K/9E9CF!O9/8!+48!\$99Q,7!. 9KI ? 74FE;!\$/+?? ?+/ ,H;!+48!D7?? ?34QC+H!S4H!
6,+FC9/?!49F!,3EF78!+T9L7!3E!49F!+66/9L78!C9/!! E7!ZC!H9I !+/7!! 4E! /7!c27F27/!+!6,+FC9/?!9/!F7K249,9QH!3E!

○77P!%=5I 7E8+H;!&: YN!s!52I /E8+H;!&: Y&!	U+,73Q2;!D7/T7/F;!1674E7! M9?? 946,+K7!1I T?3EE394!tY!
○77P!>=5I 7E8+H;!&: -%!s!52I /E8+H;!&: -<!!	12+P7E67+/7;!u94E94;! 9447!

○77P!<=5I 7E8+H;!Y (: Y!!