



^0D0k + 69A@k4Nk ' @@6@@?AC&L " ]H6::6AH6k?A! 69HI?ACS&?A&BI6k . ?B639BJ36k)34C39Fk

k

)345?@?4A9:kN9HJ:BG&I4J:7k2345?76&BI6k234C39F&H:693k65?76AH6k4N&BI6kN4::4K?ACX&k

k

^0D0D0k ' &BI434JCI&H4F F9A7k4N&BI6k@JP\6HB&F9BB63>kB69HI?AC&B6HIA?\_J6@>k9A7kF6BI474:4CG&4N&BI6k  
7?@H?2:?A60k

k

^0D0D0D0k " 5?76AH6kN43k F 66B?AC&BI6@6kH3?B63?9k F9Gk?AH: J76X&k

' 3B?@B?H>k@HI4:93:G>k43k2JP: ?HVN9H?AC&2JP: ?H9B?4A&9A7Z43k236@6AB9B?4A@k36:9B67&kB4&BI6k  
N9HJ:BG&F6FP63[ @&N?6:71@E&4N&@BJ7G&43k2679C4CGk

( 6B9?:67k@G::9P?k

/ JHH6@&NJ:k6]263?6AH6k?A&B69HI?AC&H4J3@6@k?A&4A6[ @&k93691@E&k4N&k6]263B?@6k9@&kK6::k9@k

N4JA79B?4A9:kH4J3@6@k@JHI&9@k . ?B6393Gk, AB63236B9B?4A>k, AB347JHB?4A&k4k%6@693HI&k?A&k

. ?B639BJ36k, AB347JHB?4A&kB4kT369B?56kM3?B?AC>kT39NB&9A7k ! I643G&M43R@I42>k9A7k

/6A?43k / 6F?A93k

%6@J:B@&k4N&JA?563@?BGV97F?A?@B6367k@BJ76AB&k659:J9B?4A@&k

( 6@?CA&k9A7k43C9A?Y9B?4A&k4N&H4VHJ33?HJ:93kH9F2J@>kH4F FJA?BG>k9A7k234N6@&@?4A9:k  
42243BJA?B?6@&k

k

^0D0; 0k T4AB?AJ4J@&kC34KBI&k?A&4A6[ @&N?6:71@E&k4N&k6]263B?@60k&k

k

^0D0; 0D0k " 5?76AH6k F9Gk?AH: J76X&k

' 3B?@B?H>k@HI4:93:G>k43k2JP: ?HVN9H?AC&2JP: ?H9B?4A&k

)36@6AB9B?4A@&k43k4BI6&kH4AB3?PJ?4A@&k36:9B67&kB4&BI6&kN9HJ:BG&F6FP63[ @&N?6:71@E&k4N&k  
@BJ7G&43k2679C4CGk

! I4JCI&BNJ:k@6:NV659:J9B?4A&9A7k365?@?4A&k4N&H4J3@6@k

)93B?H?29B?4A&k?A&HJ33?HJ:93k7656:42F6AB&k43k9@&@&F6AB&k9HB?5?B?6@&k

/ JHH6@&NJ:k6]263?6AH6k&B69HI?AC&kJ2263V:656:kH4J3@6@k?A&4A6[ @&k93691@E&k4N&k6]263B?@6k

)34N6@&@?4A9:k7656:42F6AB&k

%6@J:B@&k4N&JA?563@?BGV97F?A?@B6367k@BJ76AB&k659:J9B?4A@&k

k

^0D0` 0k / 4JA7A6@&&k4N&k236@6AB9B?4A>k?AH: J7?AC&BI4JCI&BNJ:kH4J3@6&k43C9A?Y9B?4A>kH4AB6AB&k36N:6HB?AC&BI6k  
P6@B&k959?:9P:6k@HI4:93@I?2&k43k93B?@B?H&k239HB?H6>k9A7&B69HI?AC&B6HIA?\_J6@&k9223423?9B6&kB4&k6:?H?B?AC&k9&  
I?CI&k:656:k4N&@BJ76AB&kJA763@B9A7?AC&k?A&9::&4A6[ @&k&B69HI?AC&k9@&?CAF6AB@0k&k

k

^0D0` 0D0k " 5?76AH6k F9Gk?AH: J76X&k

\$@6k4NkA6Kk43kJ279B67k67?B?4A@k4Nk6]BP44R@k9A7kF9B63?9:@k  
'BB6A79AH6k9Bk@HI4:93:GkH4AN636AH6@k43kK43R@I42@k4A@2679C4CGk

^0D0b0k 'P?:?BGk4kJ@6k6HIA4:4CGk9223423?9B6:Gk?A&B69HI?AC0k

^0D0b0D0k "5?76AH6kF9Gk?AH:J76Xkk  
/HI4:93:Gk43k239HB?H9:k2JP:?H9B?4A&4A&43k236@6AB9B?4A@k4Nk2679C4C?H9:kJ@6k4Nk  
B6HIA4:4CGk  
!69HI?ACk243BN4:?4kK?BI&7?@HJ@@?4A&4Nk36:659ABkJ@6@k4Nk6HIA4:4CGk  
/9F2:6k@BJ76ABk234\6HB@kBI9BkF9R6kJ@6k4Nk6HIA4:4CGk  
,AA459B?4A@k?A&BI6k2679C4C?H9:kJ@6k4Nk6HIA4:4CGk  
(656:42F6ABk4Nk4A:?A6k9A7Z43kIGP3?7kH4J3@6@k

^0D0^0k !I6kH929H?BGk4k36:9B6kBI6k@JP\6HBkF9BB63k4k4BI63kN?6:7@k4NkRA4K:67C6kKI6A@9223423?9B60kk

^0D0^0D0k "5?76AH6kF9Gk?AH:J76Xkk  
'3B?@B?H>k@HI4:93:G>k43k2JP:?HVN9H?ACk?AB637?@H?2:?A93Gk2JP:?H9B?4A&9A7k  
236@6AB9B?4A@k43k4BI63kH4AB3?PJB?4A@kk  
\$@6k4Nk?AB637?@H?2:?A93G&RA4K:67C6k9A7kF9B63?9:@k?A&H4J3@6@kk  
"NN6HB?56k69HI?ACk9A7Z43kHJ33?HJ:93k7656:42F6ABk4NkC6A639:k@BJ7?6@kH4J3@6@k43k?A&  
?AB637?@H?2:?A93GkF?A43@k43k?A&@635?H6V:693A?ACk  
T4::9P439B?4A&43k69FVB69HI?ACkK?BI&N9HJ:BGkN34F&4BI63k7?@H?2:?A6@k

^0D0c0k !I6k9P?:?BGk4k263N43F&6NN6HB?56:Gk?A&9::k4A6[@k69HI?ACk9@@?CAF6AB@>kKI6BI63k9B&BI6k  
?AB347JHB43Gk43k9759AH67k:656:k43k?A&?AB637?@H?2:?A93G&69HI?AC0kk

^0D0c0D0k "5?76AH6kN43kF66B?AC&BI6@6kH3?B63?9kF9GkP6k74HJF6AB67kPGk76F4A@B39B67k  
6]H6::6AH6k?A&?B6F@k4A6&BI34JCIk@?]k9P456k1^0D0DV^E0k " ]H6::6AH6k?A&69HI?ACk9:@k4k6AB9?:@Xkk  
%6@26HB&N43k@BJ76AB@k9@kF6FP63@k4NkBI6k/B4HRB4A&9H976F?H&H4FFJA?BGk  
%6@24A7?AC&B4k@BJ76ABk\_J6@B?4A@k6NN6HB?56:Gk  
"AH4J39C?AC&9H976F?H&N36674Fk  
)4@?B?56:Gk@66R?ACk42243BJA?B?6@k?A@?76k9A7k4JB@?76k4NkBI6kH:9@k344F&B4k6AI9AH6k  
@BJ76ABk:693A?ACk4NkBI6k@JP\6HBkF9BB63k

"5?76AH6kF9Gk?AH:J76Xkk  
+66B?AC&H:9@@6@k36CJ:93:Gk  
04:7?ACk36CJ:93k4NN?H6kI4J3@k  
+9R?AC&J@6k4Nk6F9?:k9A7k4BI63k959?:9P:6kK6PVH4AN636AH?AC&B44:@k&B4k6]B6A7k  
H:9@k344F&RA4K:67C6k9A7k4NN63k977?B?4A9:k@J2243Bk

W0` 0kk - J?76:?A6@k4A@k9224?AB F 6AB@kBI9BkH4AN63k6AJ36kk

k

W0` 0b0k ' @@?@B9ABk)34N6@@43@kA43F9::Gk922:GkN43k234F4B?4A&B4&BI6k39AR&4Nk ' @@4H?9B6k)34N6@@43k  
H4AHJ336AB&K?BI&BI6?3k369224?AB F 6AB&K?BI&B6AJ36>kJA:6@@kBI636k936k6]B6AJ9B?AC&H?3HJ F @B9AH6@k  
4JB:?A67kPG&BI6kH9A7?79B60kk

k

W0` 0b0D0k89HJ:BGk@ I4J:7k36N63k4L#4B6k36C937?AC&T\*U, (VDWk29A76F?H&9A7k234C39Fk  
@B9A7937@Sk?A&BI6k)369FP:6kKI6A&7?@HJ@@?AC&BI6k?F29HB&4N&BI6k29A76F?H&4A&BI6?3k69HI?AC>k  
@HI4:93@I?2ZH369B?56k9HB?5?BG>k9A7Z43k@635?H60kk

k

W0` 0^0kMI?:6k6]26HB9B?4A@kN43k6AJ36k9A7k234F4B?4A&936k@?F?:93>kBI6k234C39F k36H4CA?Y6@kBI9BkJA763k  
H63B9?A&H?3HJ F @B9AH6>k2345?@?4A9:kN9HJ:BG&F9G&I956kF6B&BI6kH3?B63?9&N43k6AJ36kPJB&A4Bk234F4B?4A0k

k

D<0D0k " ]26HB9B?4A@kN43k !6AJ36k9A7k)34F4B?4A&B4k ' @@4H?9B6k)34N6@@43kk

k

D<0D0D0k !69HI?ACkk

k

D<0D0D0D0k8436F4@Bk?A&9A&922:?H9B?4A&N43k6AJ36kFJ@B&P6k9A&6]2:9A9B?4A&4N&BI6kH9A7?79B6[ @k

.?B639BJ36k)34C39Fk/B9A7937@k

b

- 39AB@k  
T?B67k36N636AH6@kk  
k

.?B639BJ36k)34C39Fk/B9A7937@k

^|

' 369k`XkT4F FJA?BGk9A7k)JP:?Hk89H?AC

D<0D0`0k/635?H6kk

k

D<0D0`0D0k8?A9::G>k?A43763kB4kF66B&BI6k36\_J?36F6AB@kN43kB6AJ36k9A7k234F4B?4A&B4k '@4H?9B6k  
)34N6@@43>kH9A7?79B6@kFJ@Bk236@6ABk36H437@k4Nk@635?H6kB4&BI6k234C39F&BI9Bk76F4A@B39B6&BI6k9P?:?BGk  
B4k@J2243B&BI6k234C39F[@k@B9B67kF?@?4A@k9A7kC49:@0kT9A7?79B6@kFJ@Bk9:@4k74HJF6ABkF69A?ACNJ:k  
JA?563@?BGVK?76k@635?H6k9A7L43k@635?H6kB4&BI6kH4FFJA?BG0kk

k

)34C39FBG





) JP:?Hk:6HBj36>kCJ6@Bk:6HBj36ZK43R@I42>k34JA7B9P:6>k247H9@B>k43k3697?ACXk?Bk?@k  
6]26HB67kBI9Bk9kH9A7?79B6kK?: :k236@6ABk@HI4:93:Gk43k93B?@B?HkK43Rk9Bk9H976F?Hk  
H4AN636AH6@k43k4B I6k9223423?9B6k56AJ6@k  
/ JPF ?@?4A&4NkC39AB@k9A7k9K937@Xk&4H4F 26B?B?56k?AB63A9:k9A7Z43k6]B63A9:kC39AB@k  
43k9K937@k1B4k@J2243BkH9A7?79B6k43kC34J2ZH4 F F JA?BGEk

g ! I6k234C39F k36H4CA?Y6@kC92@k?A&@JPF ?@?4A&936kA43F9:kN43kN9HJ:BGk9BkBI6k ' @@4H?9B6k:656:k  
7J6k4kBI6kK43Rk36\_J?367k4k765?@6k9A7kH4F 2:6B6kA6Kk@HI4:93:GZH369B?56Z2JP:?HVN9H?ACk  
234\6HB@>kBI6kK43Rk36\_J?367k4kP3?ACk:93C63k43kF J:B?2:6k234\6HB@>k4kN3J?B?4A>k9A7BI6kN9HBk  
BI9Bk ' @@4H?9B6kN9HJ:BGk9:0k4k4NB6A&I956k?AH369@67k@635?H6k7JB?6@0k

' 369k ; Xk ) JP:?H9B?4A&9A7k%6H6?2Bk4Nk - 39AB@k9A7k ' K937@XkT9A7?79B6@k@ I4J:7k?AH:J76k  
65?76AH6k4Nk9HH62B9AH6k9A7Z43k2JP:?H9B?4A&1?A&23?ABk43k7?C?B9:kN43F 9BEk9A7Z43kBI6k36H6?2Bk4Nk  
C39AB@k43k9K937@k?A&4A6k43k F 436k4NkBI6kN4::4K?ACXk

/?AC:6V&43kH4V9JBI4367Z67?B67k2663V365?6K67k43k\J3?67k2JP:?H9B?4A&19HH62B67k43k?A&  
23?ABE&?A&43k4JB@?76kBI6kH9A7?79B6[ @k9369k43k9369@&4Nk6]263B?@6k9@&K6::k9@&2679C4CG>k  
?AH:J7?AC&H369B?56kK3?B?AC>k93B?H:6>kP44R&HI92B63>k F 4A4C392I>k67?B67kH4::6HB?4A>k  
B6]BP44Rk2JP:?H9B?4A&  
T4AB39HB&N43k@?AC:6V&43kH4V9JBI4367Z67?B67k2JP:?H9B?4A>k?AH:J7?AC&H369B?56kK3?B?AC>k  
93B?H:6>kP44R&HI92B63>k F 4A4C392I>k67?B67kH4::6HB?4A>kB6]BP44Rk2JP:?H9B?4A&  
/HI4:93:Gk67?B?AC>k36H4563G>k43k39A@:9B?4A&234\6HB>k?AH:J7?AC&9ABI4:4CG>k\4J3A9:>k  
B6]BP44R>k43kP44Rk67?B?AC&1@?AC:6V&43kH4V9JBI4367E&  
T369B?4A&9A7k2347JHB?4A&4Nk F J:B?V7?@H?2:?A93G&9A7Z43k7?C?B9:k F 67?9k234\6HBk  
1@?AC:6V&43kH4V9JBI4367E&k@JHI9@&9k263N43F 9AH6>kK6P@?B6>k6]I?P?B>k247H9@B>k43k  
C9F6k  
%6H6?2Bk4NkC39AB@k9A7Z43k9K937k

' 369k ` XkT4F F JA?BG&9A7k ) JP:?Hk89H?ACXkT9A7?79B6@k@ I4J:7k?AH:J76k65?76AH6k4NkK43Rk9A7k  
H:93?NG&34:6@&9A7k7JB?6@&1:697k9JBI43>kH4V9JBI43>k?A5?B67k9JBI43>k6BH0E>k?A&9Bk:69@Bk4A6k4NkBI6k  
N4::4K?ACXk

) JP:?HVN9H?ACk2JP:?H9B?4AZ@HI4:93@I?2&1A4AV2663V365?6K67Z\J3?67E&k?AH:J7?ACk  
H369B?56kK3?B?AC>k6@&9G>k93B?H:6>kP44Rk365?6K>k36243B>kKI?B6k29263>kB44:R?B>k  
?AB635?6K>kK6P@?B6kN?: F >k439:k I ?@B43G>k43kH4AB3?PJB?4A&4kP:4Ck43kA6K@:6BB63k?A&

